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BLUE BOOK

of

HARDY TREES
SHRUBS & PLANTS

GROWN BY

LUKE BROS
LIMITED

INTERNATIONAL
NURSERIES
MONTREAL QUE

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HARDY TREES
SHRUBS AND
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LUKE BROS., LIMITED

International Nurseries
" " " MONTREAL, QUE.

To Our Salesmen and Customers

WE are approaching the twenty-fifth year of our business life, during which time we have served private customers, from the humblest to the highest, from one ocean to the other, besides Municipalities, Corporations, Park Boards, Railroads, Horticultural Societies, Provincial Governments and the Dominion Government. Our business reputation, as well as our financial position is, therefore, too well known to require the use of any of the thousands of testimonials we have on file, as the result of our undivided efforts to grow and supply the best nursery stock that money, brains and experience can produce.

Our aim has always been to make the name of Luke in the nursery business, through our guaranteed policy of service and satisfaction, synonymous with the name of Rogers in cutlery, or Sterling in silver; that is, the highest standard of quality.

In the years of broadening out, we have steadily increased our plantings to meet an ever-growing demand until now, our acreage of stock, all grown by the whole-root method, is not, we believe, exceeded by any firm in the Dominion.

We have developed a sales force that is perhaps the largest in Canada in numbers, but what is more important, it is a trained force of men, schooled in this business to be of real service to our customers.

We have divided and sub-divided all departments, so that each is under a responsible, competent and experienced head.

Our volume of business has developed to that extent that we can move stock in carload lots by fast freight to all central points in Canada, and can, therefore, lay shipments down whether for Newfoundland or British Columbia in the shortest possible time and in the best condition.

Years of experience have taught us that most of the stock that dies is lost through inexperience or ignorance in planting or in its subsequent care. We, therefore, inaugurated some time ago for the benefit of our customers a Service Department, which has been greatly appreciated and generously patronized and to which all are invited to refer their horticultural difficulties.

To meet an ever-increasing demand for properly planned and tastefully designed home grounds, parks, play grounds, etc., we maintain a Landscape Department in charge of experienced and competent men, capable of drawing suitable and workable plans with the same exactness that an architect uses in designing a building.

For those interested in fruits, our District Lists, the result of our own experience and of the Experimental Farm, Ottawa, and which are free to all, are of untold value as a guide as to what should be planted in each locality in order to have the best of success.

And finally, in the adjustment of minor difficulties or differences that are bound to arise in doing a large business, we believe in and act upon the principle that the customer is always right, that is, that adjustments must be made to his satisfaction in order to hold his confidence and good-will and make each transaction of real benefit to both.

We embrace this opportunity of thanking all who have co-operated with us in the past, whether as salesmen or purchasers. We ask a continuance of that co-operation and pledge ourselves to continue to give a one hundred cents' value for every dollar spent with us, plus service and satisfaction.

LUKE BROS., LIMITED

INTERNATIONAL NURSERIES

Advice to Our Customers

PLEASE READ BEFORE MAKING OUT ORDER.

Correspondents will greatly oblige by observing, as far as possible, the following regulations:—

1st. All orders by mail should be sent in as early as possible to insure prompt attention, as it is our rule to execute them in the order in which they come to hand, hence, we cannot, except for extraordinary reasons, delay orders received first, for those coming late in the season and requiring attention at once.

2nd. Buyers ordering by letter should write out the order plainly **on a separate list** and not in the body of the letter. It will prevent mistakes in the hurry of the packing season.

3rd. **Give plain and explicit shipping directions.** When none are given, we forward according to our best judgment; but in no case, except on orders made through our agents, do we assume any responsibility after the delivery of stock in good condition to the forwarders.

4th. All orders from unknown correspondents must be accompanied with a bank draft, post-office order, or money by registered letter; fractions of a dollar may be sent in postage stamps.

5th. Where particular varieties are ordered, and particular **ages and sizes of trees, kinds of stock, etc.**, it should be stated whether, and to what extent, other varieties, sizes, ages, etc., may be substituted, in case the order cannot be filled to the letter, as happens occasionally in all establishments. Our rule is not to substitute in any case without being expressly requested to do so.

6th. All trees and plants are carefully labelled and packed in the best manner for any part of Canada, the United States, or Europe. Prices include free delivery at purchaser's nearest railway station or express office on a \$10.00 order and up. A less amount will be shipped at customer's expense.

7th. Our customers are requested to notify us instantly of any errors that may be committed in filling their orders, so that we may at once make ample amends, as we desire to conduct our business in all respects satisfactorily to those who favor us with their confidence.

CAUTION.

The reputation of our firm for square and honest dealing, and sending out stock equalled by few and surpassed by none, has led unscrupulous agents, as well as dealers and jobbers in stock, to use our name. It sometimes happens that an agent whose service we have dispensed with retains some of our literature, including order blanks.

Do not be deceived. When you are solicited for an order demand of the agent to show his Certificate of Agency, which is pasted in his plate book, and which is signed by us, and if he cannot produce this he is not one of our duly-appointed agents.

Directions for Transplanting

In presenting these instructions to our patrons, we would earnestly request that they give the most careful attention to the details. They have been compiled with a view to make them as simple as possible, and having fulfilled our part of the contract, by delivering first-class stock in good condition, also giving all necessary instructions how to care for it, if any of our customers should lose a portion of their stock, the fault cannot be on our side. Years of experience have taught us that the public lose nursery stock because they neglect it; and we have taken the precaution to send a copy of our Transplanting Directions to every customer, so that none may claim that they do not know how to plant and care for their stock.

Anything that has to be cultivated in the earth can no more live without nourishment and care than can a human being! Remember the tree, though a living thing, is tied to one spot. It cannot roam in search of food, therefore you must feed it.

We guarantee to deliver the stock in **good condition**, and could we plant and care for it for the first three months, would willingly insure the growth of every tree and shrub we send out. We seldom ever lose a plant, even when we import them from Europe, and grow them here during the summer for fall delivery, and the stock is out of the ground for many weeks.

Preparation of the Soil.—For fruit trees the condition of the soil must be such as would be adapted to grow successfully farm crops. If the land on which you are to plant your trees is not in a condition to bear these exposures, you can make it so by thoroughly underdraining, deep ploughing and subsoiling. You may enrich it in the usual manner, by turning under clover, applying barnyard manure, or where it can be obtained, vegetable mould or muck without stint. The last is well adapted for producing a large amount of fibrous roots and it is through these that the tree is fed.

Prune before Planting.—We use great care in digging and packing, but the loss of some small roots and fibres is unavoidable. If stock is properly prepared before it is planted, no permanent injury will result from this, but the preservation of the natural balance between top and roots render a **cutting back of the former absolutely necessary** in most cases. Therefore, cut off the ends of all broken and bruised roots with a sharp knife, in a slanting direction, on the under side; this will cause the wound to heal over readily, by throwing out plenty of fibrous roots at the end, then cut back the tops to the extent of about one-half the previous season's growth, taking care at all times to prune in such a manner as will tend to develop a well-formed head, sufficiently open to admit air and light freely. Where there are no side limbs the tree should be headed back to a height proper to form a top; none of the lower limbs should be cut off entirely, as it is best to form the heads as low down as possible, so that the limbs and leaves will protect the trunk of the tree from the direct rays of the sun.

Depth to Plant.—Immense numbers of trees are ruined by being planted too deep. All kinds of fruit trees (excepting dwarf pears) should be planted **not over an inch deeper** than they grew in the nursery. Dwarf pears should be set so deep that the joint where the pear is united to the quince will be at least four inches below the top of the ground. By this means roots will be thrown out from the pear, and larger trees secured.

Planting.—Make the holes large enough to admit the roots without cramping or bending, and deep enough to bring the tree to its natural depth. The fine surface soil should be used for covering the roots, and this should be carefully worked among them. If the ground is dry, it is well to pour in some water when the hole is partially filled. See that the ground is **firmly and solidly packed over all parts of the roots by exerting the full weight of the planter upon it**, so there will be no opportunity for dry air or frost to enter and destroy roots deprived of the full benefit of their natural protection. **Omission to pack the earth solidly is the most frequent cause of failure in planting nursery stock.** Fill the holes full enough to be even with the surrounding surface after the fresh earth settles. **Never use manure in contact with roots.**

Mulching is of vital importance, and should never be neglected. It prevents the moisture from escaping, and maintains an equitable temperature about the roots. The material used may be long manure, litter, straw, grass, hay, sawdust or tanbark, which should be spread on the surface around the tree for a space of from four to five feet, and three to six inches deep. Bearing trees may be benefited by mulching heavily in the winter, which will tend to prevent an early development of the fruit buds, enabling them to escape the effects of late frosts.

Staking.—If the trees are tall or in exposed situations, they should be supported by stakes to prevent injury from the action of the wind. Staking is done in the best manner by driving two strong stakes firmly into the ground, one on each side of the tree, about a foot distant from it, and fasten the trees between them with bands of straw, or other soft material, so that it may be kept in an upright position, without chafing, till the roots obtain a firm hold upon the soil.

Cultivation After Planting and Training.—Many cultivators, after taking great trouble and expense in the selecting and planting of their trees, fail of success by neglecting that after-care and attention which is equally essential. Caterpillars and canker worms, grubs and borers, slugs and aphids, disease and blight, must be watched for, fought against, and remedies faithfully applied. The wants of the growing tree must be carefully foreseen, and a faithful effort made to insure health and productiveness.

The requirements of pruning vary somewhat according to the kind of tree; we prefer, however, low training for all trees, for dwarf trees very especially. The pruning should be done each year, so that no necessity may arise for cutting large limbs. Care must always be used to keep the head of the tree open and well-balanced, cutting the limbs which may be superfluous.

Trees should be trimmed as early as possible up to the height it is intended the future head should be, that the cutting off of large limbs may not in future be necessary. This should be avoided when possible, as decay is liable to commence at point of separation, and extend into the trunk. When such removal is absolutely necessary, the wound should be carefully pared smooth, and a covering of paint or grafting wax applied to protect it from the action of the weather. Dwarf trees, particularly of the pear and apple, while young, require more pruning than any other kind of tree, in order to bring the top to a suitable form. For the first two or three years after planting, fully one-half the growth of the previous year should be removed by heading in or reducing the length of each limb. The top limbs require to be cut back more, the lower limbs less, thus producing a more equal distribution of sap, and consequently vigor to the lower limbs with the upper. After the tree has passed, say to the third or fourth years after planting, the requirement of pruning is only to keep it in the symmetrical shape, and prevent particular limbs from taking a disproportionate growth. Limbs so inclined must be headed back sufficiently, and all superfluous wood upon the tree kept promptly removed. This regularly attended to will obviate the occurrence of any necessity for amputating large limbs.

Those who are obliged to plant trees in fields of grass or grain, should see that all such are carefully mulched with coarse manure, and that the ground is kept loose and moist about the trees. A hoed crop is greatly preferable in such plantations for the first five years. After this time, standard apple, pear, cherry and plum trees will grow and produce fairly in turf. The dwarf trees and peaches should be well mulched every year with coarse manure, and the ground thoroughly cultivated.

Summer Pinching.—Those who are impatient to see fruit upon their trees, as is often the case, particularly with regard to trees tardy in coming into bearing, may expedite the fulfilment of their wishes by employing the process of summer pinching. In the month of July pinch off the ends of the young shoots; this retards for the time the flow of sap, and hastens the formation of fruit buds.

Peach Trees—They should be planted immediately on their delivery, or if not prepared to do so, the roots should be buried in the ground—they will not stand exposure to sun and air, and many are lost simply for want of care. As soon as planted cut back all side branches to within two or three inches

of the main stem. Make this the invariable practice, and never deviate from it if you wish to save your trees. The growth will be much more rapid and vigorous in consequence of this pruning, and by strictly adhering to it, or by immediate planting, or covering the roots in soil, very few, if any trees will be lost. Peaches, like all other stock we deliver, will be in fine condition, having been carefully handled and kept from exposure by us. If you do not follow our directions, and meet with loss, the fault will be entirely with you.

Evergreens.—These require very careful handling, but when once established will stand more drouth than a deciduous tree.

On account of the needles the evergreen will soon pump itself dry, and there is so much resin in the roots, when these are exposed to the air the tree becomes death struck in a few moments. The only safe way therefore is to dip the roots in a puddle of stiff mud and seal them air tight immediately on their arrival, and then trench the trees in a shady place until you get them planted. We make a practice of puddling the roots in clay before packing and you will therefore get the trees in good shape. By carefully adhering to the foregoing directions there will be little if any loss.

Perpetual Clematis—The tops of these plants die down every winter, and therefore need no protection. Remove the wrapping of straw and moss and plant in rich soil, spreading the roots well apart, being very careful not to break them. Crown should be planted four inches below surface. Dig a large hole so as to afford them plenty of room and work the soil well in and around the roots. They need plenty of food during the summer to enable them to support and supply a continued abundance of bloom. These plants will not produce the best results the first season after transplanting.

Asparagus.—To prepare a bed, dig the ground deep, incorporating large quantities of well decomposed manure. Plant the roots about three inches deep in rows 18 inches apart, and one foot apart in rows.

Berries.—After planting, Raspberries and Blackberries should be cut back to the ground, which relieves the roots and prevents them being dried out by swaying of the wind. The whole strength goes to make new wood for the following summer crop.

Berries should have a strong soil and be kept under constant cultivation. Mulching is of special value. Raspberries and Blackberries should have the old wood cut out when the bearing season is over, and new canes pinched off when three feet high. Strawberries should be mulched late in the fall. Uncover crowns early in the spring, remove mulch after fruiting, and spade in light dressing of manure. If set for fruit, keep the runners off.

Currants and Gooseberries need heavy mulching and pruning, so that new wood will have room to grow.

Roses should be planted in a deep, rich, well-drained soil so that the top roots are not less than two inches below the surface, and should be severely pruned every spring before the buds start, cutting back the last growth to three or four buds, except Climbing Roses, which may first be allowed to partly cover the space desired. Old decayed branches should never remain. Every autumn compost should be placed around the stem of the plants, and spaded into the ground the following spring.

After planting, the earth should be dug up around them so as to form a small channel all around the bush; pour into this some liquid manure, mixing the earth that has to be replaced in with it. A small quantity of liquid manure given to the bushes in the manner described twice a month, will encourage growth and blossom.

Resuscitating Trees and Plants—If trees or plants have become very dry or shrivelled from long exposures or delays, then either bury them entirely in damp soil for two or three days, or place them in water for 12 to 24 hours. If received in a frozen state, no injury will be experienced if placed unopened in a cellar, or elsewhere where they will be exposed to neither cold nor heat, but allowed to thaw out gradually.

If partially dried from long exposure, bury entirely in the ground, or place in water from 12 to 24 hours.

Fall Planting

When planted in the Fall, all trees should be banked up at least one foot high until Spring. This overcomes the tendency of the trees to heave out, protects them from mice, and prevents the roots from freezing before they have taken hold of the soil. In planting roses, shrubs, vines and other delicate stock in the Fall, **the tops should be nearly or quite buried with mellow earth during the Winter.** The surplus earth should be removed early in the Spring.

WINTERING NURSERY STOCK PROCURED IN THE FALL

In sections where the winters are very severe, it is not advisable to set out young trees and plants in the fall, but the practice of procuring them in the fall and planting them in the spring is becoming more and more popular as experience has demonstrated its advantages. In the fall nurserymen are not hurried with their own planting; the season for shipping is comparatively long, and the weather is not nearly so changeable as in the spring. Railways are not so much hurried, and there is much less chance for injurious delays than in the spring. It being practicable to plant trees so procured as soon as the frost is out, they become thoroughly established the first season.

There is a popular impression that trees dug in the fall, and heeled in over winter, are worthless. **If the heeling is well done there could not be a greater mistake.** Peach and some other young trees, if left standing during the first winter, are frequently killed or injured by frost, while if dug in the fall and treated as below described, they come through bright and uninjured.

To insure success select a dry spot where no water will stand during winter, having no grass near to invite mice. Dig a trench deep enough to admit one layer of roots, and sloping enough to permit the trees to lie at an angle of not more than 30 degrees with the ground. Having placed one layer of roots in this trench, cover them with mellow earth, extending well up on the bodies and see that this is firmly packed. Then add another layer of trees, overlapping the first, continuing as at first, until all are heeled in. As soon as this is done, cover the tops well with evergreen boughs so that they will be thoroughly protected from winds, or the earth can be filled right in and mounded up enough to shed the water. Roses and other small stock may be wholly covered with earth.

PLANT YOUNG TREES.

We cannot too strongly recommend our customers to procure young trees, especially for orchard planting. They can be taken up with more perfect roots, are much more likely to live, and will become sooner established in a new location. They can also be more readily trained to any desired shape. The largest and most successful planters invariably select young, thrifty trees.

BEST DISTANCES FOR PLANTING.

Standard Apples	30 feet apart each way
Standard Pears and Strong Growing Cherries.....	20 feet apart each way
Duke and Morello Cherries.....	18 feet apart each way
Standard Plums, Apricots, Peaches, Nectarines..	16 to 18 feet apart each way
Dwarf Pears.....	10 to 12 feet apart each way
Dwarf Apples.....	10 to 12 feet apart each way
Quinces	10 to 12 feet apart each way
Grapes	rows 10 to 16 feet apart; 7 to 16 feet in rows
Currants and Gooseberries.....	4 by 6 feet
Raspberries and Blackberries.....	4 by 6 feet

NUMBER OF PIECES ON AN ACRE.

Distances Apart.	No. of Plants.	Distances Apart.	No. of Plants.
3 inches by 3 inches.....	696,960	5½ feet by 5½ feet.....	1,417
4 inches by 4 inches.....	392,040	6 feet by 6 feet.....	1,210
6 inches by 6 inches.....	174,240	6½ feet by 6½ feet.....	1,031
9 inches by 9 inches.....	77,440	7 feet by 7 feet.....	881
1 foot by 1 foot.....	43,560	8 feet by 8 feet.....	680
1½ feet by 1½ feet.....	19,360	10 feet by 10 feet.....	435
2 feet by 1 foot.....	21,780	12 feet by 12 feet.....	300
2 feet by 2 feet.....	10,890	13 feet by 13 feet.....	257
2½ feet by 2½ feet.....	6,960	14 feet by 14 feet.....	222
3 feet by 1 foot.....	14,520	15 feet by 15 feet.....	205
3 feet by 2 feet.....	7,260	16 feet by 16 feet.....	170
3 feet by 3 feet.....	4,840	16½ feet by 16½ feet.....	160
3½ feet by 3½ feet.....	3,555	17 feet by 17 feet.....	150
4 feet by 1 foot.....	10,890	18 feet by 18 feet.....	135
4 feet by 2 feet.....	5,445	19 feet by 19 feet.....	120
4 feet by 3 feet.....	3,630	20 feet by 20 feet.....	110
4 feet by 4 feet.....	2,725	25 feet by 25 feet.....	70
4½ feet by 4½ feet.....	2,151	30 feet by 30 feet.....	50
5 feet by 1 foot.....	8,712	33 feet by 33 feet.....	40
5 feet by 2 feet.....	4,356	40 feet by 40 feet.....	27
5 feet by 3 feet.....	2,904	50 feet by 50 feet.....	17
5 feet by 4 feet.....	2,178	60 feet by 60 feet.....	12
5 feet by 5 feet.....	1,745	66 feet by 66 feet.....	10

Rule.—Multiply the distance in feet between rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill; which divided into the number of feet in an acre (43,560) will give the number of plants or trees to the acre.



A Well-kept Apple Orchard in Bloom.

Plans for Orchards

No. 1

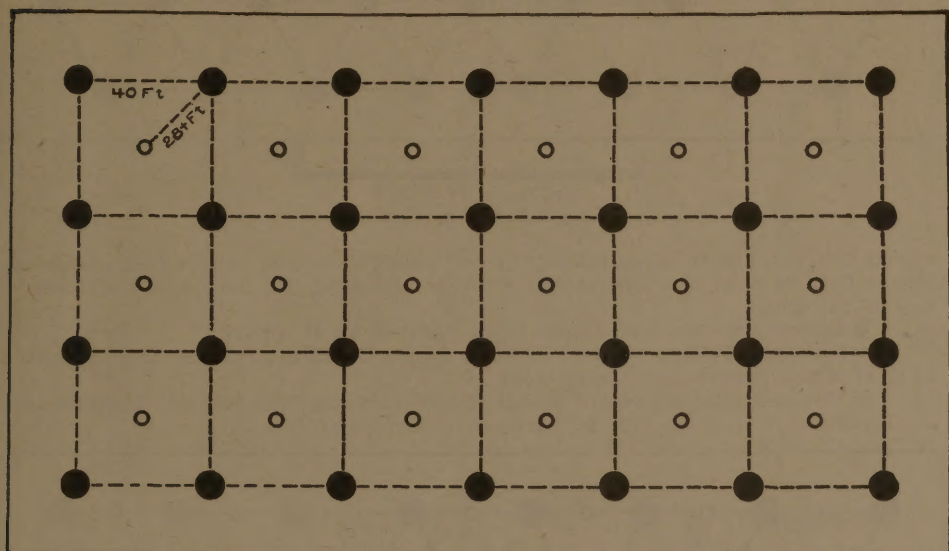
OLD SQUARE METHOD—FOR APPLES ONLY.

Permanent Trees Planted 40 Feet Apart, with Fillers in Centre of Square 28 Feet from Permanent Trees.

The old square method is only to be recommended where a permanent orchard is to be planted with **Fillers of Apples**. The plan below shows sample acre orchard, 160 ft. by 280 ft. with permanent trees planted 40 ft. apart, with fillers in centre of the square of the permanent trees, making the fillers 28 ft. from the permanent trees.

● Denotes permanent Apple trees planted 40 ft. apart.

○ Denotes Fillers planted 40 ft. apart between the rows of permanent trees.



SCALE OF FEET

No. 1.

No. 2

NEW TRIANGULAR METHOD OF PLANTING.

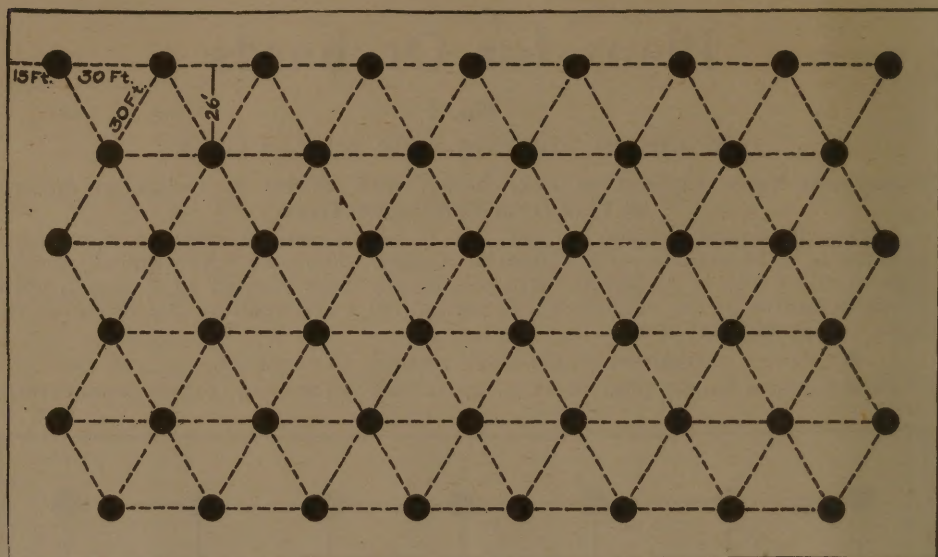
Acre block 270 ft. by 156 ft. Plan No. 2 (p. 10) is the most desirable plan for a permanent Apple Orchard where Apple fillers are not used. More trees can be planted to the acre on this triangular method than in the old square method, so that there is a considerable saving of valuable space. Trees can be cultivated three different ways instead of two in the old square method.

● Denotes trees planted 30 ft. apart each way.

No. 3

NEW TRIANGULAR METHOD OF PLANTING.

Plan No. 3 (p. 10) shows acre block 270 ft. x 156, planted with permanent Apple trees, Dwarf Pears, Sour Cherries, and Small Fruits—a splendid plan for



0 50 100
SCALE OF FEET

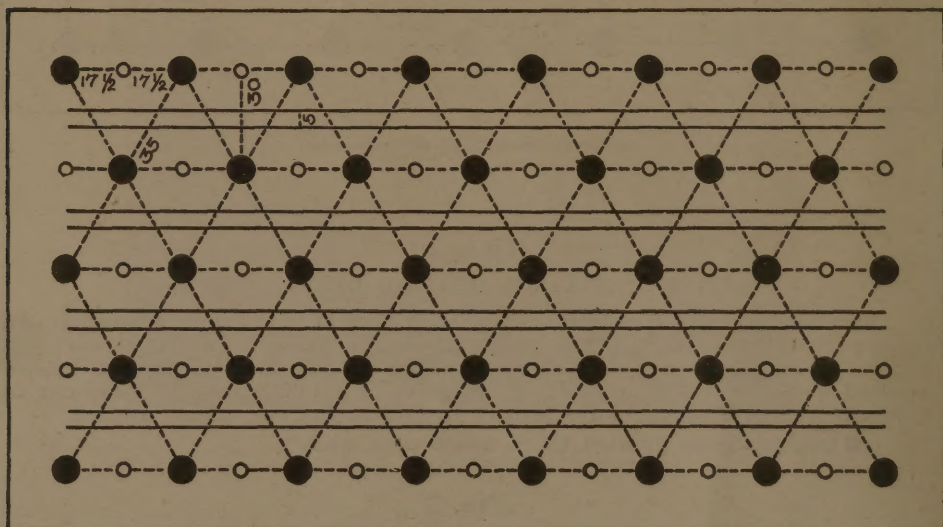
No. 2.

mixed Fruits. The most suitable plan for anyone starting in the Fruit business. Every foot of land is made use of without affecting the permanent success of any of the trees.

● Denotes permanent Apple trees planted 35 ft. apart.

○ Denotes Fillers (Dwarf Pears, Sour Cherries, Plums, etc.), planted $17\frac{1}{2}$ ft. from permanent Apple trees.

— Denotes double rows of Small Fruits, such as Raspberries, Blackberries, Gooseberries, Currants, etc., in between the rows of trees.



0 50 100
SCALE OF FEET

No. 3.

SPRAYING CALENDAR

PLANT.	1ST APPLICATION.	2ND APPLICATION.	3RD APPLICATION.	4TH APPLICATION.	5TH APPLICATION.	6TH APPLICATION.
APPLE. Black spot fungus, codling moth, leaf-eating caterpillars, borers, blister mite, curculio, apple aphid, scale insects.	<i>Lime-sulphur wash</i> or <i>Poisoned Bordeaux</i> . Just before leaf buds open. (Important.) <i>Lime-sulphur wash</i> , <i>Kerosene emulsion</i> , or <i>Whale-oil soap</i> . For Oyster shell scale, spray trees late in hatch. For Oyster shell San Jose scale.	<i>Poisoned Bordeaux</i> , or <i>Lime-sulphur wash</i> just before blossoms open. (Important.) <i>Kerosene emulsion</i> , or <i>Whale-oil soap</i> , before buds start, for aphid and scale insects; again in June when young scale insects hatch.	<i>Poisoned Bordeaux</i> , or <i>Lime-sulphur wash</i> . As soon as blossoms fall. (Important.) <i>Alkaline wash</i> for borers at end of May.	<i>Poisoned Bordeaux</i> , or <i>Lime-sulphur wash</i> , 10-15 days later, if there is black spot. For aphid and scale insects; two coats, applying second as soon as first is dry.	<i>Poisoned Bordeaux</i> , or <i>Lime-sulphur wash</i> , 10-15 days later if black spot is severe. <i>Alkaline wash</i> for borers at end of June.	<i>Poisoned Bordeaux</i> , or <i>Lime-sulphur wash</i> , for winter apples, if there is black spot.
CHERRY. Rot, leaf diseases and injurious insects. Cut out and burn Black Knot, whenever seen.	<i>Poisoned Bordeaux</i> . Before flower buds open. <i>Kerosene emulsion</i> or <i>Whale-oil soap solution</i> . For aphid.	<i>Poisoned Bordeaux</i> . When fruit has set. (Important.)	<i>Poisoned Bordeaux</i> . 10-15 days later. (Important.)	<i>Ammoniacal Copper carbonate</i> . 10-15 days later. (Important.)	If a late brood of the "cherry slug" appears, dust it with fresh slaked lime, or spray with <i>Paris green</i> . (Important.)	
CURRENT. Leaf spot, "currant worm," currant aphid.	<i>Paris green</i> . When worms appear. For aphid, <i>Kerosene emulsion</i> , <i>Whale-oil soap solution</i> or <i>Tobacco and soap wash</i> .	<i>Hellebore</i> . When fruit is fully formed.	<i>Bordeaux</i> . After fruit is picked.	<i>Bordeaux</i> . 10-15 days later.		
GOOSEBERRY. Mildew, "currant worm."	<i>Copper sulphate</i> or <i>Lime-sulphur wash</i> . Just before leaves open.	<i>Poisoned Bordeaux</i> , or <i>Potassium sulphide</i> (1 oz. to 2 galls. water), or <i>Lime-sulphur wash</i> . Just before flower buds open.	<i>Poisoned Bordeaux</i> — <i>Hellebore</i> . <i>Lime-sulphur wash</i> , or <i>Potassium sulphide</i> , when fruit has set. (Important.)	<i>Lime-sulphur wash</i> , <i>Ammoniacal Copper carbonate</i> , or <i>Potassium sulphide</i> . 10 days later.		
GRAPE. Mildew, rot, anthracnose, "thrip" (or leaf-hopper).	<i>Copper sulphate</i> . Before buds start. For anthracnose only. (Important.)	<i>Bordeaux</i> . Just before blossom. (Very important.)	<i>Bordeaux</i> . As soon as fruit has set. <i>Kerosene emulsion</i> . For leaf-hopper. (Very important.)	<i>Bordeaux</i> . 10-15 days later. (Important.)	<i>Poisoned Bordeaux</i> . 10-15 days later. If disease persists (Important.)	<i>Ammoniacal Copper carbonate</i> . If disease persists. (Important.)
PEACH, APRICOT, NECTARINE. Rot, leaf-cur, curculio, bud moth, bark borer, scale.	<i>Lime-sulphur wash</i> . (Very important.) Before buds swell.	<i>Bordeaux</i> . 3 lb. copper sulphate, 3 lbs. lime, 50 galls. water, <i>Paris green</i> (3 oz.) Just before blossoms open.	<i>Bordeaux</i> (as before). <i>Paris green</i> (3 oz.) Soon after fruit has set.	<i>Bordeaux</i> (as before). <i>Paris green</i> (3 oz.) 8-12 days later.	<i>Bordeaux</i> (as before) 8-12 days later. If rot is prevalent.	<i>Ammoniacal Copper carbonate</i> . 10-15 days later. If rot is prevalent.
PEAR. Spot, cracking, leaf blight, codling moth, blister mite, "slug," pear psylla.	<i>Copper sulphate</i> . Before buds start. (Important.) For pear psylla, <i>Lime wash</i> in winter. <i>Kerosene emulsion</i> or <i>Whale-oil soap</i>	<i>Poisoned Bordeaux</i> . Just before blossoms open. (Important.)	<i>Poisoned Bordeaux</i> . Soon after blossoms fall. (Important.)	<i>Poisoned Bordeaux</i> . 10-12 days later.	<i>Bordeaux</i> . 10-15 days later.	<i>Paris green</i> . If late brood of "slug" appears.
PLUM. Rot, blight, shot-hole bud moth, curculio aphid. Cut out and burn Black Knot.	<i>Copper sulphate</i> and <i>Paris green</i> before buds open. (Important.)	<i>Poisoned Bordeaux</i> . Soon after blossoms have fallen. (Important.)	<i>Poisoned Bordeaux</i> . 10-12 days later. <i>Kerosene emulsion</i> , <i>Whale-oil soap</i> , or <i>Tobacco and soap wash</i> . For aphid.	<i>Poisoned Bordeaux</i> . 10-15 days later. <i>Kerosene emulsion</i> , <i>Whale-oil soap</i> , or <i>Tobacco and soap wash</i> . For aphid.	<i>Ammoniacal Copper carbonate</i> . 10-15 days later. If rot is prevalent.	<i>Ammoniacal Copper carbonate</i> . 10-20 days later. If rot is prevalent.
ROSE. Mildew, leaf blight, "rose slug," "rose thrip."	Mildew in Greenhouse. Paint heating pipes with paste made of equal parts of sulphur, lime and water.	Leaf Blight. <i>Ammoniacal Copper carbonate</i> . "Rose Slug." <i>Paris green</i> (1 oz. in 12 galls. water) or <i>Hellebore</i> .	"Rose Thrip."— <i>Kerosene emulsion</i> , or <i>Whale-oil soap</i> . When "thrip" appears.	ASPARAGUS. Rust.	Dust flowers of sulphur over and through the plants before the rust makes its appearance in summer. Two applications should be made each at the rate of about 150 lbs. per acre. The sulphur will adhere better if the plants are first sprayed with <i>Whale-oil soap and water</i> .	
RASPBERRY, BLACKBERRY, DEWBERRY. Anthracnose, rust.	<i>Copper sulphate</i> . Before buds burst. Dig out	<i>Bordeaux</i> . 10-15 days later. and burn badly diseased	<i>Bordeaux</i> . Soon after old canes are cut out. plants.	ASPARAGUS Beetle.	The remedies most in vogue are dusting the plants at short intervals with freshly slaked lime at the time the slimy larvae occur upon the plants. Poisoning with <i>Paris green</i> in either dry or mixed mixtures is also useful.	

Insecticides

PARIS GREEN.

For Foliage-eating Insects.

Paris green	1 lb.
Unslaked lime	1 lb.
Water	160 gals.

Dry Mixture—1 lb. Paris green with 50 lbs. flour, land plaster, slacked lime or other perfectly dry powder.

Poisoned Bran.—Mix $\frac{1}{2}$ lb. of Paris green with 50 lbs. of slightly moistened bran.

ARSENATE OF LEAD.

For Foliage-eating Insects.

Arsenate of lead	3 lbs.
Water	40 gals.

Mix thoroughly before using.

HELLEBORE.

White hellebore	1 oz.
Water	2 gals.

Or to be dusted undiluted over the attacked plants.

PYRETHRUM (or Insect Powder).

Pyrethrum powder	1 oz.
Water	3 gals.

Dry Mixture—Mix thoroughly 1 part by weight of Insect Powder with 4 of cheap flour and keep in a close vessel for 24 hours before dusting over plants attacked.

KEROSENE EMULSION.

For Bark-Lice and Other Sucking Insects.

Kerosene (coal oil)	2 gals.
Rain water	1 gal.
Soap	$\frac{1}{2}$ lb.

Dissolve soap in water by boiling; take from fire, and, while hot, turn in kerosene and churn briskly for 5 minutes. For use dilute with 9 parts of water so the above 3 gallons of stock emulsion will make 30 gallons of spraying mixture.

FLOUR EMULSION.

Kerosene	1 quart.
Flour	8 oz.
Water	2 gals.

Stir together the flour and kerosene, then add the water, and churn violently for five minutes. To be used at once.

WHALE-OIL SOAP.

For brown or black aphids.....	1 lb. in 4 gals. water.
For scale-insects (young).....	1 lb. in 5 gals. water.
For green aphids or thrip.....	1 lb. in 6 gals. water.
For San Jose Scale (in winter)...	2 lbs. in 1 gal. water.

TOBACCO AND SOAP WASH.

Soak in hot water for a few hours 10 lbs. of tobacco leaves (home-grown will do); strain off and add 2 lbs. of whale-oil soap. Stir until all is dissolved, and dilute to 40 gals. Apply early and two or three times at short intervals.

LIME WASH.

Unslaked lime 1 to 2 lbs.

Water 1 gal.

Strain through sacking before spraying.

LIME-SULPHUR WASH.

For San Jose Scale and Fungous Diseases.

Lime 20 lbs.

Sulphur, powdered 15 lbs.

Water to make 40 gals.

Slake the lime with only enough water to do it thoroughly. Add the sulphur by dusting it over the lime while slacking; stir well and boil for at least an hour, adding only so much hot water as is necessary for easy stirring. When thoroughly cooked, strain through sacking, and apply hot.

When concentrated lime-sulphur wash is used it should be diluted for use, when there are no leaves on the trees, to 1 gallon of the concentrated wash to about 9 gallons of water varying with the density of the wash. For use in summer the lime-sulphur should be diluted to 1 gallon of the concentrated wash to 30 to 35 gallons of water. Arsenate of lead is the best poison to use with the lime-sulphur wash. Arsenite of lime will injure foliage.

ALKALINE WASH.

For Borers.

Soft soap reduced to the consistency of thick paint by the addition of a strong solution of washing soda in water. If applied with a brush about the 1st of June on the morning of a warm day, this will dry in a few hours and form a tenacious coating not easily dissolved by rain.

If 1 pint of crude carbolic to the gallon of wash be added, it will make it more effective.

N.B.—All the above recommendations are dependent on weather. If heavy rain falls within 24 hours, applications should be repeated. Always wash out thoroughly with clean water all pumps and nozzles immediately after using. The gallon referred to above is the Imperial gallon.

REMEDY FOR SPRUCE GALL.

The Spruce Gall-Louse can be successfully treated by spraying with a tobacco and soap wash made by soaking ten pounds of tobacco leaves in three or four gallons of hot water for six hours, the liquid strained off and two pounds of whale-oil soap added. When the soap is all dissolved, the mixture can be diluted to forty gallons. Two or three applications should be made at short intervals.

Fungicides

BORDEAUX MIXTURE.

For Fungi.

Copper sulphate (Bluestone)	4 lbs.
Unslaked lime	4 lbs.
Water (1 barrel)	40 gals.

Dissolve the copper sulphate (by suspending it in a wooden or earthen vessel containing 4 or 5 or more gallons of water). Slake the lime in another vessel. If the lime, when slaked, is lumpy or granular, it should be strained through coarse sacking or a fine sieve. Pour the copper sulphate solution into a barrel or it may be dissolved in this in the first place; half fill the barrel with water; dilute the slaked lime to half a barrel of water, and pour into the diluted copper sulphate solution, then stir thoroughly. It is then ready for use. (Never mix concentrated milk of lime and copper solution.)

A stock solution of copper sulphate and milk of lime may be prepared and kept in separate covered barrels throughout the spraying season. The quantities of copper sulphate, lime and water should be carefully noted. Bordeaux mixture deteriorates with age and should be used as soon as made.

To test Bordeaux mixture let a drop of ferrocyanide of potassium solution fall into the mixture when ready. If the mixture turns reddish brown, add more milk of lime until no change takes place.

POISONED BORDEAUX MIXTURE.

For Fungi and Leaf-eating Insects.

To the 40 gallons of Bordeaux mixture prepared as above, add 4 to 8 ounces of Paris green, or 3 lbs. arsenate of lead.

For Potato Blight and Colorado Potato Beetles.

Instead of 4 lbs. copper sulphate, use 6 lbs.; and for potato beetles, 8 oz. or more of Paris green, or 3 lbs. arsenate of lead.

SODA-BORDEAUX (BURGUNDY MIXTURE) FOR POTATO BLIGHT AND ROT.

Copper sulphate (Bluestone)	6 lbs.
Washing soda (Carbonate of soda)	7½ lbs.
Water (1 barrel)	40 gals.

Dissolve copper sulphate as for Bordeaux mixture. Dissolve 7½ lbs. washing soda in 4 gallons water. Pour the copper sulphate solution into a barrel, half fill the barrel with water, then stir in the solution of washing soda, and finally fill the barrel with water. It is now ready for use. The Soda-Bordeaux adheres better to the foliage when freshly made than the ordinary Bordeaux mixture, but it deteriorates rapidly in this respect and must be used as soon as made. If left standing for 24 hours it will have lost nearly all of its adhesiveness. The Soda-Bordeaux is not recommended in preference to the ordinary Bordeaux mixture, but where lime cannot be obtained it may be used with good results. Furthermore, on account of its freedom from gritty matter there is less likelihood of the nozzles becoming clogged when it is used. As washing soda is more expensive than lime, this mixture costs a little more than the ordinary Bordeaux mixture.

Note.—If the Soda-Bordeaux is used for spraying fruit trees, the formula is copper sulphate, 4 lbs.; washing soda, 5 lbs.; water, 40 gallons. Arsenical poisons should not be used with Soda-Bordeaux, as they may injure the foliage.

RESIN SOAP.

Resin	8½ lbs.
Washing soda (Sal soda, Carbonate of soda)...	6 lbs.
Water	4 gals.

Dissolve 6 pounds of washing soda in 4 gallons of hot water and then bring the solution to a boil. In another vessel melt 8½ lbs. resin. When the latter is melted, pour it slowly into the boiling soda solution until all the resin is added, stirring it well at the same time. After all the resin is added, continue boiling for one hour or until a homogeneous mixture is obtained. If properly made, this will mix well with water or Bordeaux mixture. As some water will be evaporated in boiling, sufficient should be added to make the stock mixture 4 gallons.

Two quarts of the above stock mixture should be used with 40 gallons of Bordeaux mixture.

Resin soap may be added to Bordeaux mixture (2 quarts to 40 gallons) and makes it adhere better to foliage.

COPPER SULPHATE SOLUTION.**For Fruit Trees Before Buds Burst.**

Copper sulphate (Bluestone)	1 lb.
Water	20 gals.

As soon as dissolved it is ready for use. Use only before the buds open. To destroy Wild Mustard, spray before bloom, with 5 lbs. in 20 gallons.

AMMONIACAL COPPER CARBONATE.

Copper carbonate	5 oz.
Ammonia	2 quarts.
Water (1 barrel)	40 gals.

Dissolve the copper carbonate in the ammonia. The ammonia and concentrated solution should be kept in glass or stone jars, tightly corked. It is ready for use as soon as diluted with the 40 gallons of water. To be used when Bordeaux cannot be applied on account of staining the fruit.

FORMALIN, CORROSIVE SUBLIMATE.

For Potato Scab, soak the tubers before planting, either:—

- I. For 2 hours in a solution of commercial Formalin (Formaldehyde) 8 oz. in water 15 gallons; or 1 oz., in water 2 gallons.
Or
- II. For 1½ hours in a solution of Corrosive sublimate 2 oz. in water 16 gallons. When dry cut up for planting.

Formalin has the advantage of being neither poisonous nor corrosive, while Corrosive sublimate is a fatal poison if taken internally. It also corrodes metals. The solution should therefore be made in wooden or glazed vessels. All treated seed potatoes should be planted, and any solution left over should be poured into a hole in the ground.

For Smut in small grains, soak the seed for 2 hours before sowing, in Formalin solution 16 oz. to 32 to 40 gallons water.

N.B.—All the above recommendations are dependent on weather. If heavy rain falls within 24 hours, applications should be repeated. Always wash out thoroughly with clean water all pumps and nozzles immediately after using. The gallon referred to above is the Imperial gallon.

Fruit Department

SELECT APPLES

The first fruit in importance is the apple. Its period of ripening, unlike that of other fruits, extends nearly or quite through the year. By making judicious selections of summer, autumn and winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

Varieties starred are the hardier sorts, and are so indicated for the sake of convenience.

If apples are planted at the rate of fifty trees per acre, rows of peach trees can be planted between the apples, which, growing more quickly than the apple trees, soon protect them from the winds, and thus prove a great benefit to them. After eight or ten years of productiveness, as the space is needed for the apples, the peach trees may be removed, leaving the orchard better for the protection, and at the same time having yielded the planter a large return for his outlay and labor.

SUMMER.

Early Strawberry—Medium, striped with deep red; tender, sub-acid, and excellent; a poor grower, but productive. August.

Golden Sweet—Rather large; pale yellow; very sweet and good. Strong grower and good bearer. August.

***Lowland Raspberry** (Liveland Raspberry)—A red transparent apple surpassing the popular Yellow Transparent—most valuable of the Russians. Fruit medium to large, clear, waxen white, striped, shaded, and marbled crimson; surpassingly beautiful. Flesh white, frequently tinged pink; very tender, pleasant, mild, and rich sub-acid. Its beauty and its excellent quality combined with its large size make it one of the most popular of all early summer apples. Tree hardy and long-lived, healthy and vigorous. Fruit ripens just a few days ahead of Yellow Transparent and covers a long season—several weeks. Succeeds South as well as far North; makes a long-lived orchard tree, resistant to blight; is a young bearer and retains its freshness in storage remarkably well. Has been tested everywhere; an ideal early apple for the home orchard and for local markets.

***Primate**—Above medium; straw color, tinted with blush, tender, fine grained, juicy, and sub-acid; a moderate grower and abundant bearer. Ripens August and September.

Réd Astrachan—Large; roundish; nearly covered with deep crimson, over-spread with a thick bloom; juicy, rich, acid, beautiful. The tree is a vigorous grower, with a large foliage and a good bearer. August.

***Russian Transparent** (Yellow Transparent)—A Russian variety, imported in 1870 through the Agricultural Department. Tree an upright grower, a very early and abundant bearer. Fruit of good size; skin clear white, turning to a pale yellow; flavor acid and very good. Ripens from ten days to two weeks earlier than Early Harvest.

Star—Originated in New Jersey. The largest early apple known, measuring ten to twelve inches in circumference. Color, yellowish pale green; quality, pleasant sub-acid; a very superior cooking and a very good eating apple. An annual bearer. Its great size and early bearing qualities make it one of the most valuable for market. Season—summer, June 20th to July 20th.

Sweet Bough—Large; pale, greenish yellow; tender and sweet. Moderate grower and good bearer. August.

***Tetofsky**—A Russian apple which has proved profitable for market growing. The tree is an upright, spreading grower, forming an open head; comes into bearing extremely early, usually the second year after transplanting, and bears every year. Hardy as a crab. Fruit good size, nearly round; yellow, beautifully striped with red; flesh white, juicy, pleasant, acid, aromatic. July and August.

AUTUMN.

***Alexander (Emperor)**—Of Russian origin. Large; deep red or crimson; flesh yellowish white, crisp, tender with pleasant flavor. Very hardy. October.

Blenheim Orange—Fruit large, roundish, oblate, conical, yellowish, becoming deep orange, stained on the sunny side with dull and dark red stripes. Stem short and stout, in a deep broad basin. Flesh yellow, breaking, mild sub-acid, pleasant, good. October to December.

***Duchess of Oldenburg**—Of Russian origin. Large size, roundish; streaked with red and yellow; flesh whitish, juicy; flavor sprightly, sub-acid; tree a vigorous grower, very hardy; very early and abundant bearer. While it is indispensable in the North, it is almost equally so in the South. We confidently recommend it for the orchard as one of the most valuable sorts for market, or in the garden for domestic use. September.

***Fameuse (Snow Apple)**—Medium size, roundish, oblate; whitish ground, striped with deep red; flesh very white, juicy and pleasant. Tree very hardy; one of the most valuable Northern sorts. November and December.

Gravenstein—Large striped and beautiful; tender, juicy and high flavored; vigorous and productive. September and October.

***Haas (Gros Pommier, Fall Queen)**—Medium size; pale greenish yellow, shaded and striped with red; tender, juicy, sub-acid. Tree vigorous and very hardy; upright grower; bears early and abundantly. September to November.

Jones' Red Fameuse—An improved snow apple. It is now generally believed that the fact of the Theory of Individuality in fruit trees is correct. This apple propagated from scions we obtained from Harold Jones, Esq., Maitland, Ont., who discovered a few trees in his extensive orchard of Fameuse, some trees bearing finer and more highly colored fruit, from which he grafted his whole orchard, thus having made his reputation famous as a

grower of the finest Fameuse, for which he always has customers at extra prices for all he can supply.

Maiden's Blush—Medium size, flat, quite smooth and fair; pale yellow, with beautiful red cheek; tender, sprightly, pleasant acid flavor. Fair grower and good bearer. September and October.

***McMahon's White** — Highly recommended for the cold North. Is a fair, large yellowish apple, with good market qualities. Spoken of in Wisconsin as being head and shoulders above any other apple. Fruit large, almost white, with a faint blush, very beautiful; flesh tender. Tree vigorous and hardy as a crab; bears young and abundantly. October to January.

North Star—A seedling of the Duchess of Oldenburg. Tree small, moderately vigorous to vigorous. Fruit, medium to large, uniform. Skin thin, tender, smooth, bright pale yellow or whitish mostly covered with a bright pinkish-red blush striped and splashed with bright carmine and cov-



Peerless Apples. (See page 18.)

ered with light bloom. Dots scattering, light, small. General appearance, red or red striped over contrasting yellow, attractive. Flesh tinged with yellow, firm, crisp, nearly fine-grained, tender, very juicy, aromatic, brisk sub-acid, eventually becoming mild, very good. Season, September and October or sometimes later.

Peerless—A valuable new apple for the Canadian trade, originated from seed of Duchesse, planted by J. C. Miller, Minnesota. The tree is a very fine, straight, upright grower and very hardy. Fruit: size, medium to large. Form, oblate to oblate round.

Color, handsomely striped with brilliant carmine on yellowish green ground, numerous small whitish spots on skin. Flesh, yellowish white, fine grain. Flavor, sub-acid and agreeable. Core, small. Season, Fall and early Winter, according to location. An exceedingly handsome apple, most showy of all varieties shown at the recent fruit show held in Toronto.

Pumpkin Sweet (Pumpkin Russet, Pound Sweet)—A very large, round, yellowish russet apple, very sweet and rich. Tree a vigorous, rapid, upright grower; valuable. October and November.

St. Lawrence—Large, yellowish, striped and splashed with carmine. Flesh white, lightly stained, crisp, juicy, tender and vinous. Tree hardy and productive. September.

Twenty Ounce (Cayuga Red Streak)—Very large, nearly round; yellow, striped with red. Quality good. Vigorous and good bearer. Popular as a market variety. November to December.

WINTER.

Baldwin—Large, roundish; deep bright red; juicy, crisp, sub-acid, good flavor. Tree vigorous, upright and very productive of fair, handsome fruit. In sections where it thrives, one of the best and most popular winter apples. January to April.

***Baxter** (Larue, Red Pound)—A magnificent, large, red apple; very showy and well adapted for a fancy market variety, quite exceeding the handsomest specimens of King in point of beauty; color very dark red or crimson; quality not equal to Northern Spy, but will outsell it or any other variety in market. Tree vigorous, without the least sign of tenderness, and with good cultivation will bear annually large crops of fruit. December and January.

Bellefleur, Yellow—Large; yellow, with blush cheek; very tender, juicy, sub-acid, in use all winter. Very valuable. A moderate grower and good bearer.

Ben Davis (New York Pippin, Kentucky Streak, etc.)—A large, handsome striped apple of good quality. Tree very hardy, vigorous and productive; a late keeper; highly esteemed in the West and South-West.



Baxter Apples.

ous and productive; a late keeper; highly esteemed in the West and South-West.

- Bethel**—Originated in Bethel, Vermont. Tree vigorous. Fruit large. Form roundish, slightly conic; stem short, rather slender. Skin thick, tough, smooth; good deep yellow, washed and mottled with red and striped with purplish carmine, becoming very dark red in highly colored specimens. Dots numerous, conspicuous, russet or light. Flesh yellowish, firm, coarse, crisp, moderately tender, moderately juicy, mild sub-acid, fair to good. Season, November to midwinter or possibly March.
- Black Ben Davis**—The most valuable acquisition to the list of commercial apples ever introduced, has taken its place even more rapidly than we anticipated (introducing new apples is a very slow process), as the hardiest and best of the entire Ben Davis family. In time no one will plant Ben Davis and Gano who knows and can get genuine Black Ben.
- Bottle Greening**—Resembles Rhode Island Greening in size and flavor; but tree a better grower and much hardier. A native of Vermont. December to March.
- *Canada Baldwin**—This beautiful apple originated in Province of Quebec, Canada, and appears to be of the Fameuse type. Tree very hardy; vigorous and thrifty grower. It begins to bear quite young, giving heavy and light crops in alternate years. Considered one of the most valuable long keeping apples both for market and family use. Fruit medium size, nearly round, skin whitish, thickly striped and splashed with rich red and crimson; flesh very white, fine, sometimes a little stained next to the skin, tender, juicy, with a mild, sub-acid flavor; core small. January to April.
- Cooper's Market**—Medium, conical; yellow, striped with crimson; flesh white; tender, brisk, sub-acid; vigorous, upright grower. December to May.
- Cranberry Pippin**—Fruit medium, roundish, oblate, regular. Skin very smooth, light yellow splashed with red; flesh white, moderately juicy, brisk, sub-acid. Good. Season winter; long keeper. In the experiment of shipping apples to Australia this proved the best shipper, and the best keeper of any of the varieties in the test. November to February.
- Delicious**—The "Delicious" is a large apple, distinctive in shape and beautiful in color. Its surface is almost covered with a brilliant dark red, blending to golden yellow at the calyx. The calyx is one of its characteristic features, for it has five protuberances more or less pointed or flat rounded. The flesh is tender, fine-grained, crisp, juicy and melting, while its flavor is sweet, slightly touched with acid, with a delightfully fragrant aroma. The tree is a late bloomer and a heavy bearer. It is one of the strongest and hardiest, and a most vigorous upright grower. Season, November to March.
- Fallawater**—Very large, globular, yellowish green, dull red cheek; juicy, crisp; pleasant sub-acid flavor. Tree a strong grower, very productive, even while young. November to March.
- *Gano**—Originated in Missouri. Form conical, good size and smooth; deep red, shaded on sunny side to mahogany; very attractive; flesh pale yellow, fine-grained, tender, pleasant, mild, sub-acid; is a good shipper and keeper. Tree healthy, vigorous and hardy. An annual and prolific bearer. February to May.
- *Gideon**—Raised in Minnesota from crab seed by Mr. Gideon. An upright grower; medium to large; color yellow, with vermilion blush on sunny side; mild acid and quality very good. December to March.
- Golden Russet**—Medium size, dull russet, with a tinge of red on exposed side; flesh generally crisp, juicy and highly flavored. Tree a vigorous grower and a great bearer. Very popular. November to April.
- *Greening, North-Western**—"This new Wisconsin seedling, which received the first prize of the Wisconsin State Horticultural Society in 1883, over a large competition, as a 'seedling winter apple,' has been thoroughly tested in most trying places in Wisconsin, and proved equal to the Wealthy in every respect as a tree, while in quality of fruit and keeping it is the superior of that variety. Fruit large, round, conic, smooth, greenish yellow, often a fine blush; flesh fine grained, firm, juicy, sub-acid, good. January to Spring. Has had twenty years' trial in Wisconsin." Mr. George J. Kellogg, the well-known Wisconsin fruit specialist, writes: "I am well acquainted with the Wisconsin fruits you offer. You want North-Western Greening; I measured apples at our last State Fair twelve inches in circumference; will stand beside Wolfe River; keeps till spring."

***Grimes' Golden** (Grimes' Golden Pippin)—An apple of the highest quality; medium to large size; yellow. Tree hardy, vigorous, productive. January to April.

Hubbardston Nonsuch—Large; striped yellow and red; tender, juicy and fine. Strong grower and good bearer. November to May.

Jacob's Sweet—This is a large, handsome, showy apple, almost round; skin greenish yellow, with a beautiful blush on the sunny side. Originated near Boston, and is regarded as very valuable; of excellent quality; a good keeper; a strong grower and large bearer. December and January.

Jonathan—Medium-roundish, yellow nearly covered with red; tender, fine-grained and fine flavor. Tree slender and spreading. November to April.

King (Tompkins County)—Large and handsome; striped red and yellow. Tree vigorous and productive; one of the best. November to May.

King David—One of the most beautiful of apples, resembling the "Jonathan," but larger and higher colored. Color deep rich red with distinct markings of darker red—blending the colors of the "Jonathan" and "Arkansas Black," of which varieties it is clearly a cross. The tree and foliage resemble the "Jonathan," but it is more vigorous and hardy. It is a strong spreading grower and bears young and annually. Season November to May.

Kitchener—Fruit resembles Stark in shape; not quite as red, although somewhat smoother, having a very glossy skin; flesh sprightly, sub-acid; first-class dessert apple as well as a good culinary apple. Commands a high price in the English markets, frequently as high as \$6.50 per barrel for No. 1 fruit.

Nothard and Jones of London recommend it as a magnificent apple for the English market, for which market it should not be shipped later than Feb. 10th. Tree a vigorous grower and very productive, bearing when very young.

***Longfield**—A Russian variety, imported some years since. Tree, a free upright grower, early and abundant bearer. Medium to large; yellow, with a blush on the sunny side like the Maiden's Blush; rich, sprightly, sub-acid; quality as good as Fameuse and somewhat like it. December to March.

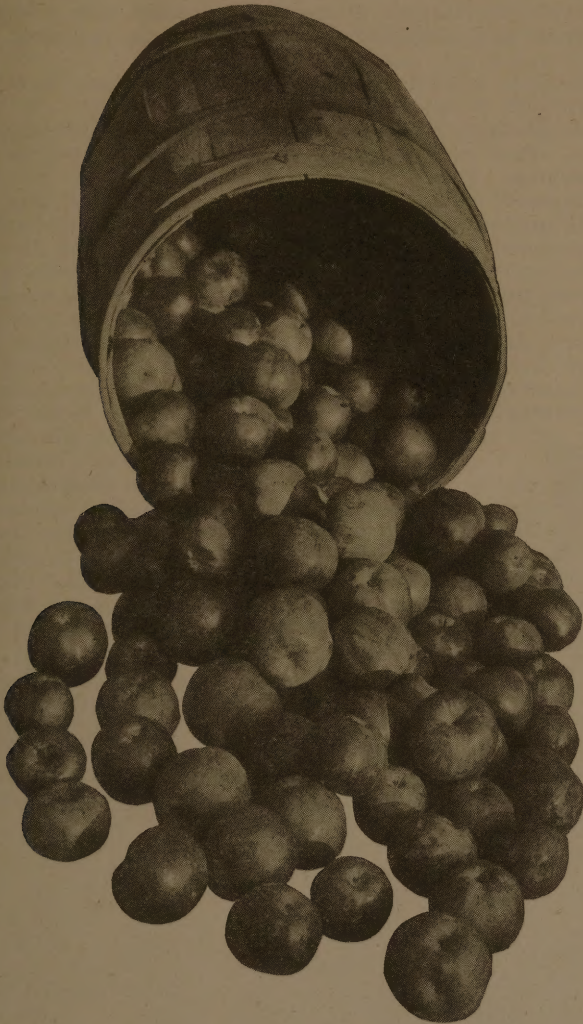
La Salle (Macdonald)—An exceedingly good variety that should be in every orchard. Very prolific and hardy. A native of Quebec and is especially adapted for sections in New Ontario, Quebec and New Brunswick where winters are severe. Fruit large; color bright red; size medium to large. The tree is a strong grower, very prolific and hardy. Season March 1st.

***Mann**—Fruit medium to large, roundish, oblate, nearly regular; skin deep yellow when fully ripe; flesh yellowish, half fine, half tender; juicy, mild, pleasant, sub-acid. Good to very good. The tree grows straight and symmetrical, and makes a large tree in the orchard. It is an early and annual bearer. Season, March, but in good cellars will keep till June.

***McIntosh Red**—An exceedingly valuable, hardy Canadian sort. Medium size; nearly covered with dark red. Flesh white, very tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but larger and more hardy, and fully equal in quality to this standard sort. November to February.

***Milwaukee**—A seedling of Duchess which originated in Wisconsin. Fruit large, oblate, slightly angular; skin pale yellow well splashed and washed with bright red and crimson; dots few; small, white, not prominent; cavity deep and of medium width, slightly russeted; stem short, moderately stout, basin deep, open, slightly wrinkled; calyx open. Flesh yellowish, crisp, very tender, juicy, acid, with but little characteristic flavor; core small. Quality above medium; season, December to March. Tree spreading, a moderate grower and an early and good cropper. A promising apple for the north, as it appears to be very hardy.

***Milding**—Tree remarkably hardy, a strong, vigorous, upright grower; very productive of large, fair fruit, very desirable and hardy, sub-acid, yellow with red stripe, January.



Milwaukee Apples. (See page 20.)

Northern Spy—

Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish red. Flesh white and tender, with a mild sub-acid, rich and delicious flavor. In perfection in January and keeps till June. The tree is a strong upright grower, and forms a very compact head; should be kept open by pruning, so as to admit the air and light freely.

Ontario—

A hardy Canadian Winter apple, early and productive bearer, large in size, a cross between Northern Spy and Wagener; the coming apple for the English market; valuable as a late keeper; so closely resembles the Northern Spy that experts have taken it for that variety. Crops annually, and at an early age. January and February.

***Peter**—We take pleasure in calling the attention of all lovers of fine fruit to this new hardy sort. Origin, Wealthy seed, and in form, size and color an exact duplicate of the parent, but differing in flavor and season, keeping from four to six weeks longer. At the Iowa State Fair, in 1886, the Peter apple was pronounced by the judges to be superior to the Wealthy in every respect. The tree is harder than the Duchess or Wealthy.

***Pewaukee**—A seedling from Duchess of Oldenburg. Fruit medium to large, surface bright yellow, partially covered with dull red; flesh yellowish white, breaking, juicy, flavor sub-acid, rich, aromatic, spicy, something like the Jonathan; quality good to best. Tree strong grower and very hardy. January to June.

Red Canada (Steele's Red Winter)—Medium size; red with white dots; flesh rich, sub-acid and delicious. Tree a moderate slender grower. A superior fruit for table or market. November to May.

Rhode Island Greening—Large; greenish yellow; tender, juicy and rich, with rather an acid flavor; growing strong and spreading; an abundant bearer. December to April.

Ribston Pippin—Valuable in the Eastern States. Of medium size and good quality; yellowish green and clouded with dark red on exposed side. November to April.

Rome Beauty—Large, roundish, slightly conical, with bright red on a pale yellow ground; fine grained; juicy; good quality.

Russet Roxbury or Boston—Medium to large; greenish or yellow russet; crisp, good, sub-acid flavor. Tree vigorous and productive; very popular on account of its long keeping. June.

***Salome**—Tree a strong grower; equals Wealthy in hardiness; an early and annual bearer; fruit of medium and uniform size; quality very good, which it retains even into summer; keeps well with ordinary care until July.

***Scarlet Pippin** (Leed's Beauty)—Origin, Lyn, Leeds Co., Ont., where it has been locally grown for some years. Medium size, round, inclined to oblate regular, skin yellow, waxy, nearly always covered entirely with bright to dark crimson in stripes, or in suffused patches, overspread with a light bloom, altogether exceedingly handsome. Cavity shallow, broad, occasionally showing a protuberance on one side; stem, short, stout. Basin almost wanting, slightly wrinkled; calyx open. Flesh firm, white, flaky, crisp,

melting, sub-acid, juicy, core small, quality very good; season early winter. Might be taken for McIntosh Red, but flesh is firmer and crisper. As a home market apple it is undoubtedly valuable. Tree said to be hardy and productive. Is less subject to the "apple spot" than Fameuse, and Ottawa dealers pay 50c. extra per bbl. for Scarlet Pippins than for Fameuse, Experimental Farm Report. January and February.

***Scott's Winter**—This is the apple which well replaces the Roxbury Russet of a milder clime. It is of medium size, heavily striped and sometimes covered with red. It is as hard as a rock until April, sour, and only useful for cooking. As the warmth of spring begins to reach it, it mellows, becomes mild, aromatic, and far better in quality for dessert than the Roxbury Russet.

The tree is a true "iron-clad," a profuse bearer on alternate years, with a good crop in intermediate seasons. The Scott keeps well into July, and not only keeps, but keeps fresh and crisp with almost no loss when properly handled and stored.

***Stark**—Esteemed in Ohio as a long keeper and valuable market fruit.

Fruit large, roundish; skin greenish yellow, much shaded with light and dark red and



Stark Trees from Our Nursery and Fruit from Our Experimental Orchard.

sprinkled with brown dots; flesh yellowish, juicy, mild, sub-acid. January to May.

Seek-No-Further (Westfield)—Medium to large; slightly russeted with dull red stripes, tender, rich, spicy and fine. Good grower and bearer. November to February.

Staymens (Staymens Wine Sap)—Medium to large; oblate, conical; greenish yellow, mostly covered and indistinctly splashed and mixed with dull dark red, with medium numerous gray dots; flesh yellow, firm, tender, juicy, mild, sub-acid, aromatic, quality best. Another seedling of Wine Sap, originated in Kansas; is larger and more beautiful. February.

Talman Sweet—Medium, pale yellow, slightly tinged with red; firm, rich and very sweet. The most valuable baking apple; vigorous and productive. November to April.

Wagener—Medium to large; deep red in the sun; flesh firm; sub-acid and excellent; very productive; bears very young. December to May.

***Walbridge**—Medium size; striped with red; handsome and of excellent quality. Vigorous grower and productive. Very hardy, and considered of great value in the North and North-West. March to June.

***Wealthy**—A native of Minnesota, where it has proved perfectly hardy, vigorous and productive. Fruit of medium size, red streaked with white; quality good. December to February.

Wellington—Tree very vigorous. Fruit above medium to large; pretty uniform in size and shape. Form roundish, somewhat oblate, sometimes obscurely ribbed. Skin tough, rather pale bright yellow, sometimes blushed with light red and striped with thin carmine. Prevailing color yellow. Flesh



Harvest Time.

whitish with slight yellow tinge, firm, crisp, moderately fine, tender, very juicy, brisk sub-acid, slightly aromatic, good for cooking. Season, November to March or April.

Windsor Chief—Promising variety for severe climates on account of its superior hardness; of good size, productive, red color, although rather dark. Flavor pleasant, sub-acid; good quality. The tree is very hardy and comes into bearing early and is a reliable cropper, yielding good crops annually. Season, December to April.

***Winter St. Lawrence**—A new apple brought to the notice of the public through the members of the Montreal Horticultural Society. Originating and succeeding in the Province of Quebec, where the climate is as trying to the production of apples as any on the continent, where the attempt is made to grow them. This must, therefore, be classed as one of the very few extremely hardy. Fruit somewhat resembling the well-known fall St. Lawrence, with the additional merit of being a winter apple. January.

***Wolf River**—A new and beautiful fruit of the very largest size. Originated near Wolf River, Wisconsin, and may well be classed among the iron-clads. Skin greenish yellow, shaded with crimson; flesh white, juicy, tender, with a peculiar pleasant, mild sub-acid flavor. Tree a strong, stout grower, and a great bearer. January and February.

York Imperial—Of medium size, truncated, oval, angular. Skin greenish yellow, shaded with crimson; flesh tender, crisp, aromatic. Highly esteemed in Pennsylvania, where it originated. November to February.

NEW RUSSIAN APPLES.

The varieties having a Russian origin have proved themselves so hardy that many horticulturists have come to the conclusion that if we of the North wish to maintain our supremacy in the apple market, we must experiment with Russian apples until we can find a list of varieties, thoroughly hardy, to take the place of the ones being winter killed.

We have imported direct from the Imperial Botanic Gardens of Petrograd and other reliable sources in Russia many new varieties, and are now able to offer the following to the public, all of which have been tested by us and found extremely hardy:—

- No. 230. Titus**—The fruit of the Zolotareff type, and is the largest and showiest of the new Russian varieties tested by us. A grand apple for the North.
- No. 236. Antony**—The Antonovka is the king apple of the Russian Steppe.
- No. 245. Borivinka**, or rather Mushroom, as it is translated. Just like the Duchess, except that it is a month later.
- No. 277. Vargul**—A good tree, one of the best winter apples of Central Russia; very promising as a large winter apple of good quality.
- No. 290. Ukraine**—We have seen it bearing in Russia, looking like a large uncolored Northern Spy. There it is known as a very hardy tree, fruit of good quality, which keeps and ships well.
- No. 378. Hibernial (Orsimui)**—Without doubt the hardiest standard apple in cultivation, and especially adapted for growing in the cold North-West; a crooked hardy grower and an early bearer. Fruit large, handsome; excellent for cooking; season October to May.
- No. 1260. Raspberry**—Small, fine dark red, sprightly sub-acid; season July and August. Exceedingly productive and very hardy.

EXTRA HARDY OR IRON-CLAD APPLES.

The following list comprises such varieties as have been well tested, and can be safely recommended for planting in all sections of Canada and the Provinces, Northern New York and New England, Minnesota, Wisconsin and the extreme North-West. Their desirability is not confined by any means to those sections alone, but they are selected for their extreme hardness and because they will thrive and bear abundant crops where varieties of the Baldwin,

and less hardy types will winter kill. Many of them are quite equal or superior to the Baldwin in quality, and are recommended for planting in any section.

The list is prepared with reference to the pages of this catalogue on which descriptions of them may be found:—

Summer.		Page			Page.
Lowland Raspberry.....		16	Hibernal		24
Primate		16	Longfield		20
Russian Transparent		16	La Salle (McDonald).....		20
Tetofsky		16	Milwaukee		20
Autumn.			Milding		20
Alexander		17	Northwest Greening		19
Duchess of Oldenburg		17	Peter		21
McMahon's White		17	Scott's Winter		22
Winter.			Scarlet Pippin		22
Baxter		18	Wealthy		23
Canada Baldwin		19	Winter St. Lawrence		24
Gideon		19	Windsor Chief		24
			Wolf River		24

HARDY APPLES.

The following list of varieties we rate as hardy in comparison with the Baldwin. They will grow in sections like that along the St. Lawrence River and Central Maine, New Hampshire and Vermont, where the Baldwin either winter kills outright or leads a very precarious existence. We include in the list the "Iron-Clad" varieties, which are equally valuable for all sections:—

		Page.			Page.
Bottle Greening		19	Red Astrachan		16
Fameuse		17	Russian Transparent		16
Golden Russet		19	Salome		22
Grimes' Golden		20	Stark		22
Haas		17	Star		16
Jones' Red Fameuse		17	St. Lawrence		18
McIntosh Red		20	Talman's Sweet		23
Northern Spy		21	Twenty Ounce		18
Ontario		21	Walbridge		23
Pewaukee		21			

SELECT CRAB APPLES

Within the past few years much attention has been given to improving this class of fruit because of their adaptability to cold sections, where only a few varieties of apples can be successfully grown. These efforts have been attended with marked success. Crab apples succeed equally well in all sections, and are valuable for cider, preserving, jelly, ornament, and some of the improved sorts are excellent for eating. Sent to the Eastern markets, they command a very high price.

General Grant—Tree an erect, vigorous grower; fruit in dense clusters; of high quality, equal to the Duchess of Oldenburg. October to December.

Hyslop—Almost as large as Early Strawberry Apple; deep crimson; very popular on account of its large size, beauty and hardiness. Keeps well into the winter.

Martha—Gideon's new seedling, No. 5, from Minnesota. Immensely vigorous, hardy, producing every year. Mr. Gideon says:—"For sauce it surpasses any apple we ever grew." A great acquisition. October.

Montreal Beauty—Fruit large, bright yellow, mostly covered and shaded with rich red; one of the most beautiful of all crabs in appearance. Flesh yellowish, rich, firm and acid. Very good. October and November.

Orange—Tree moderate grower; an annual and abundant bearer. Fruit larger than Transcendent. Flesh firm, crisp, juicy and delicious. October to December.

Red Siberian—Fruit small, about an inch in diameter; yellow, with scarlet cheek; beautiful. Tree an erect, free grower; bears when two or three years old. September and October.

Transcendent—Tree immensely productive, bearing after second year, and producing good crops by the fourth season. Fruit from one and one-half to two inches in diameter, being large enough to quarter and core for preserving and drying. Excellent for sauce and pies both green and dried. The best of its class for cider, being juicy and crisp, and is also by many considered a good eating apple. Skin yellow, striped with red. September and October.

Whitney—Large, averaging one and one-half to two inches in diameter; skin smooth, glossy, green, striped, splashed with carmine; flesh firm, juicy and flavor very pleasant; ripens latter part of August. Tree a great bearer and very hardy; a vigorous, handsome grower, with a dark green, glossy foliage. August.

HYBRID CRAB APPLES.

For Manitoba, Saskatchewan and Alberta.

For a number of years the Dominion Experimental Farms at Brandon, Man., and Indian Head, Sask., have done considerable experimental work in growing Apple trees, especially for the cold districts of the North-West Provinces, and have achieved some remarkable results, producing a number of new varieties of special merit and hardiness. In 1887 the work was begun, seed being obtained from the Imperial Botanic Gardens, Petrograd, Russia, of a small wild Siberian Crab Apple, known as the Berry Crab (*Pyrus Baccata*). This Crab grows in abundance along the shores of the Baikal Sea and in many parts of Northern Siberia. This variety was cross-bred with some of our hardiest Canadian Apples, resulting in a number of high-bred varieties that have been thoroughly tried out and seem to be quite as hardy as the wild form of *Baccata*. We offer below the cream of these varieties, which will be especially valued by our patrons in the North-West Provinces.

Alberta (*Pyrus baccata* with Haas)—Tree, a strong grower and an abundant bearer. Fruit $1\frac{1}{4}$ inches across, $1\frac{1}{2}$ inches deep; round, somewhat flattened and slightly ribbed. Calyx persistent. Stem, about half an inch long. Color, greenish yellow, with a bright red cheek. Flesh, nearly white, juicy, slightly astringent, astringency scarcely perceptible when the fruit is ripe. Quality, fair to good. Season, last week in September to middle of October.

Jewel (*P. baccata* with Yellow Transparent)—Tree, a strong grower and a heavy bearer. Fruit, size $1\frac{1}{4}$ inches across and $1\frac{1}{2}$ inches deep; nearly round. Calyx, persistent. Stem, about $1\frac{1}{4}$ inches long. Color, yellowish, with a pale red cheek, very pretty. Flesh, moderately firm, crisp, juicy, of good flavor, sub-acid, with very little astringency. Quality, good, one of the best. Season, last week in August to middle of September.

Pioneer (*P. baccata* with Tetofsky)—Tree, a strong grower and a heavy bearer. Fruit, size $1\frac{1}{2}$ inches across and $1\frac{1}{4}$ inches deep; nearly round, slightly ribbed. Calyx, persistent. Stem, rather long. Color, yellow, with a pink cheek. Flesh, white, fine-grained, firm, crisp, sub-acid, slightly astringent, moderately juicy, with a pleasant flavor. Season, latter part of September and October.

Prince (*P. baccata* and Tetofsky)—Tree, a strong and upright grower and very productive. Fruit, $1\frac{1}{2}$ inches across and $1\frac{1}{4}$ inches deep; nearly round. Calyx, drops in many of the specimens. Stem, 1 to $1\frac{1}{2}$ inches in length. Color, bright red, of a deeper shade on the side exposed to the sun, with a few pale dots and streaks. Flesh, nearly white, juicy, sub-acid, somewhat astringent; astringency lessens as the fruit ripens. Of a pleasant flavor. Ripe early in September.

Tony (*P. baccata* with McMahon White)—Tree, a strong and spreading grower and a heavy bearer. Fruit, size, $1\frac{1}{4}$ inches across and $1\frac{1}{2}$ inches deep; form round, somewhat flattened. Calyx, persistent. Stem, about $1\frac{1}{4}$ inches long. Color, greenish-yellow, streaked and splashed with bright red and with many yellowish dots. Flesh, yellowish-white, juicy, sprightly, sub-acid, slightly astringent with a pleasant flavor. Quality, medium. Season, late September and October.

SELECT PEARS

The cultivation of this noble fruit is rapidly extending as its value is appreciated. The range of varieties is such that, like apples, they can be had in good eating condition from August until early spring. For small grounds we would advise planting mainly Dwarf Trees.



Pears.

The melting, juicy texture, the refined flavor, and the delicate aroma of the Pear, give it a rank above all other fruits except the grape. The pear, like most things highly desirable and valuable, cannot be had without attention and labor. The relative prices of the apple and the pear being about one to ten, purchasers of the latter can well afford to give the trees the high cultivation necessary to secure the best results.

Dwarf Pears are the result of budding Pears on Angers Quince stocks, and they must always be planted sufficiently deep to cover the junction of the Pear and Quince—two to three inches—the soil made rich and well tilled, and about one-half the previous summer's growth cut off each spring. Under this treatment Dwarfs are everywhere successful. The side branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height of three or four feet if desired. Trim in pyramid form.

Summer Pears should be gathered at least ten days before they are ripe,

and Autumn Pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves begin to fall.

When pear trees are heavily laden, the fruit should be thinned when about one-third grown; else the fruit will be poor and the trees injured.

The letters "D" and "S" appended to the description of varieties, indicate favorable growth either as "Dwarfs" or "Standards," or both.

SUMMER.

Bartlett—Large size, often with a beautiful blush next the sun; buttery, very juicy and high flavored. Tree a strong grower, bearing early and abundantly; very popular. Last of August and first of September. Grows best as a Standard.

Clapp's Favorite—Large size; pale lemon yellow; flesh fine grained, juicy, melting, rich and buttery; a cross between Bartlett and Flemish Beauty; earlier than Bartlett and resembling the Flemish Beauty in growth, having its fruit evenly distributed over the tree; of a uniform size. It is equally hardy with Flemish Beauty; a good grower and productive. In season during August and September. Care should be taken to pick the fruit at least ten days before it would ripen upon the tree. D. and S.

Koonce—Season very early—as early as the earliest, fruit medium to large, very handsome; surface yellow, one side covered with a bright carmine, containing brown dots. Stem short. Quality very good; spicy, juicy, sweet. A very desirable early pear for Northern districts. D. and S.

Wilder's Early—Medium or rather small, regular in form; greenish yellow, with a brownish red cheek; handsome nutmeg, sweet, pleasant, very good. Tree a vigorous grower and great bearer. First of August. D. and S.

AUTUMN.

Anjou (Beurre d'Anjou)—A large, handsome pear, buttery and melting, with sprightly vinous flavor; keeps into mid-winter. Tree a vigorous grower and a good bearer. We have no hesitation in pronouncing it to be one of the most valuable pears in the Catalogue. Does equally well as a standard or a dwarf. Keeps until the winter holidays, when it commands very high prices in the market. D. and S.

Bartlett-Seckel—Good size, hardy, vigorous, and productive, of highest quality, rich and well flavored; high color, handsome. A cross between two of the oldest and best varieties, combining the best qualities of each. September and October. S.

Beurre Bosc—A large and beautiful russety pear; very distinct, with a long neck, high flavored and delicious. A moderate grower and rather irregular; bears well. We top graft in order to obtain good standard trees. September and October. S.

Beurre Clairgeau—We call particular attention to this variety, on account of its importance and popularity. Its size, early bearing, productiveness and beauty render it a profitable market variety. It should only be grown as a standard. Very large, light yellow, shaded with crimson and russet; an early and abundant bearer. From its handsome appearance and productiveness, one of our best market varieties, and is extensively planted for this purpose. October and November. S.

Dempsey—The Dempsey was produced from a seed of the Bartlett fertilized with Duchesse d'Angouleme. Tree an upright good grower; foliage large, glossy dark green, resembling both parents. Fruit large, obtuse pyriform, irregular in outline. Skin smooth, green changing to yellow as it ripens, with a slight brown tinge where exposed to the sun. Stem about an inch long, stout, and set slightly to one side. Calyx shallow. Flesh white, fine grained, tender, buttery, almost melting, with a rich, sweet, delicious flavor. As a dessert or market pear it is of the highest merit. It will stand transportation to the most distant markets. Season, October and November. D. and S.

Duchesse d'Angouleme—Very large, with rough and uneven surface, of a greenish yellow, with patches of russet and a dull red cheek; a vigorous and strong grower and good bearer while quite young. It attains its greatest perfection on the Quince root. In season during October and November. D.

Flemish Beauty—Large size, greenish yellow and brown, with large spots of russet; rich and juicy, with a melting and musky flavor; an old and highly esteemed variety, a strong grower and a great bearer, hardy and desirable. This variety ranks for hardiness among pears as the Duchess of Oldenburg among apples. In season during September and October. S.



Duchesse d'Angouleme (Reduced).

- Howell**—Large size, light waxen yellow, sweet and melting, of excellent quality; a strong and hardy grower and good bearer. One of the best American varieties, and extensively planted all over the country. In season during September and October. S. and D.
- Kieffer**—Said to be a hybrid between the Bartlett and the Chinese Sand Pear. The tree is a vigorous grower, an early and regular bearer and very productive. Fruit large, rich yellow, tinged with red, somewhat russety and very handsome. Flesh white, buttery and juicy. The editor of *Gardener's Monthly* says: "We have eaten fruit of the Kieffer Pear, which was equal in luscious richness to any we ever ate." Ripens in October. Commands the highest price in the market. The *American Agriculturist* says: "We have not in a long time seen a fruit that appears to unite so many elements of popularity." S.
- Louise Bonne de Jersey**—Large size, oblong, pyriform, pale green in the shade, but overspread with brownish red in the sun; very juicy and melting, with a rich and excellent flavor; a profitable market variety succeeding better on the quince than the pear root. In season during September and October. D.
- Ritson**—Fruit medium; skin greenish yellow, heavily sprinkled with russet; flesh white, exceedingly juicy, rich, buttery, melting; very fine grained; for canning or dessert it has no equal; a good grower, abundant cropper, and hardy as a Burr Oak. This valuable pear is a seedling, planted by the late John Ritson, Oshawa, Ont., one of the first settlers of that town, and during his lifetime an able farmer and a lover of horticulture and advanced ideas. The original tree is over 70 years of age from the seed, and still bears large crops of fine fruit, while other varieties have succumbed to blight or other diseases in the same field. It has never been in any way affected by disease or weather, but has for over fifty years regularly borne large crops of fruit. We believe it to be the most valuable seedling introduced. October and November. D. and S.
- Roosevelt**—A valuable new French pear, size very large; shape roundish; flavor fine texture, juicy, melting; ground color yellow clouded with salmon rose. Season, October.
- Seckel**—Small size, yellowish russet, with a red cheek; flesh whitish, buttery; very juicy and melting, with a peculiarly rich, spicy flavor and aroma; the richest and finest variety known, and extensively planted all over the country. A most prolific bearer. September and October. S. and D.
- Sheldon**—Large size, roundish, greenish yellow, mostly covered with thin light russet, very juicy; melting, sweet and vinous; a fine grower and good bearer, but does not succeed on the quince. It should, however, have a place in every collection, no matter how small, on account of its good quality. In season during October and November. S.
- Vermont Beauty**—This beautiful and valuable pear originated on Grand Isle, Lake Champlain; is very hardy, having endured extremely cold weather, and has never lost a bud from either cold or blight. Vigorous grower, free from leaf-blight. An annual and abundant bearer. In quality the fruit approaches nearer the most delicious of pears, the Seckel, than any other pear on the market. The fruit is full medium size, yellow, covered on the sunny side with a bright carmine red, making it exceedingly attractive and handsome; flesh melting, rich, juicy, aromatic; best. Ripens with and after the Seckel, though much larger in size and more attractive in appearance; cannot fail to prove a general favorite and very valuable. S.
- Worden Seckel**—This is a seedling of the Seckel. The fruit, which is medium in size, is borne in clusters; firm grained and juicy. In size, beauty and keeping qualities, it surpasses its parent. Season of ripening, October; keeping in good condition till December. D. and S.

WINTER.

- Dorset**—A new variety of great merit; offered now for the first time in Canada. Very handsome and showy; late keeper; pear large, golden yellow brown with light red on sunny side. Flavor, juicy, melting, sweet and of good quality. Ships and keeps well and is a valuable late pear. Ripe in February, but keeps in perfection till May. Tree a vigorous grower.

President Drouard—A variety recently introduced from France, highly recommended for its rich flavor and great keeping qualities. Tree a vigorous grower. Fruit large and handsome; melting and juicy, with a delicious perfume. March to May. S.

DWARF PEARS

The selection of varieties to be grown as dwarfs is a matter of much importance. We give below a list best adapted for that purpose.

Clapp's Favorite
Beurre d'Anjou
Duch. d'Angouleme

Dempsey
Howell
L.B. de Jersey

Ritson
Seckel
Pres. Roosevelt
Dorset

SELECT CHERRIES

The Cherry thrives best on a sandy or gravelly soil, and there attains its highest perfection, but will do well in almost any situation except a wet one. It is one of the most ornamental of all fruit trees, which, with its delicious and refreshing fruit, makes it very desirable for planting near the dwelling, where beauty and shade as well as fruit are so much sought for and so desirable.

We divide them into two classes, Hearts and Bigarreaus and Dukes and Morellos. The first are strong and vigorous growers, making large, open, spreading heads or tops, are best suited for the purposes of shade, and produce large, heart-shaped, sweet fruit. The Duke and Morellos are all of slower



Six-year-old Cherry Orchard in Full Bearing.

growth, and do not ever attain so large a size, but are more hardy, less liable to get injured by bursting the bark, and generally produce acid fruits. One and two-year-old trees are the most desirable for transplanting, and are usually from four to six feet high.

HEART AND BIGARREAU CHERRIES.

Fruit heart-shaped, with tender, sweet flesh. Tree of rapid growth, with large, soft, drooping leaves.

Black Eagle—Large, black; tender, rich, juicy, and high-flavored. Tree a moderate grower and productive. Ripe beginning of July.

Black Heart (Black Ox-Heart, Elkhorn)—A very old variety. Fruit medium size, heart-shaped, irregular; skin glossy, deep black; flesh tender, juicy, rich, sweet. Tree a rather rapid grower, hardy and productive. Early in July.

Black Tartarian—Very large; purplish black; half-tender; flavor mild and pleasant. Tree remarkably vigorous, erect and beautiful grower, and an immense bearer. Ripe last of June and beginning of July. One of the most popular varieties in all parts of the country.

Gov. Wood—The finest of Dr. Kirtland's seedling, of Ohio; skin light yellow, shaded with light to deep red, tender and delicious. Tree a vigorous grower, and most productive. End of June. Hangs well on the tree.

Great Bigarreau—A strong, vigorous grower; fruit of large size, heart-shaped; firm, juicy and sweet; flavor excellent; color dark red, when fully ripe turning black. Ripe early in July.

Mercer—An early heart-shaped cherry. Fruit larger than Black Tartarian. Color dark red and of finest quality. Tree of robust growth with dark green foliage; hardy and profuse bearer. A decided acquisition.

Mezel (Monstreuse de Mezel, Great Bigarreau)—A French variety, very large, dark brown, firm; tree a free grower, spreading irregular. Middle of July.

Napoleon Bigarreau (Royal Ann)—Fruit of the largest size; pale yellow, with a bright red cheek; flesh very firm, juicy, and when fully ripe, of an excellent flavor; tree vigorous and productive. Ripens early in July.

Schmidt's Bigarreau—A most promising cherry; fruit of immense size, of a rich deep black; flesh dark, tender, very juicy, with a fine flavor; bears abundantly, and makes a most noble dish for the table.

Windsor—New. A seedling, originated at Windsor, Canada. Fruit large, liver-colored, resembling the Elkhorn, Black Heart, nevertheless quite distinct; ripens three or four days after that variety; flesh remarkably firm and of fine quality. Tree hardy and very prolific. A valuable late variety for market and for family use.

Yellow Spanish—Large, pale yellow, with a bright red cheek in the sun; flesh firm, juicy and delicious; one of the best, most beautiful and popular of all light-colored cherries. Tree erect, vigorous and productive. End of June.

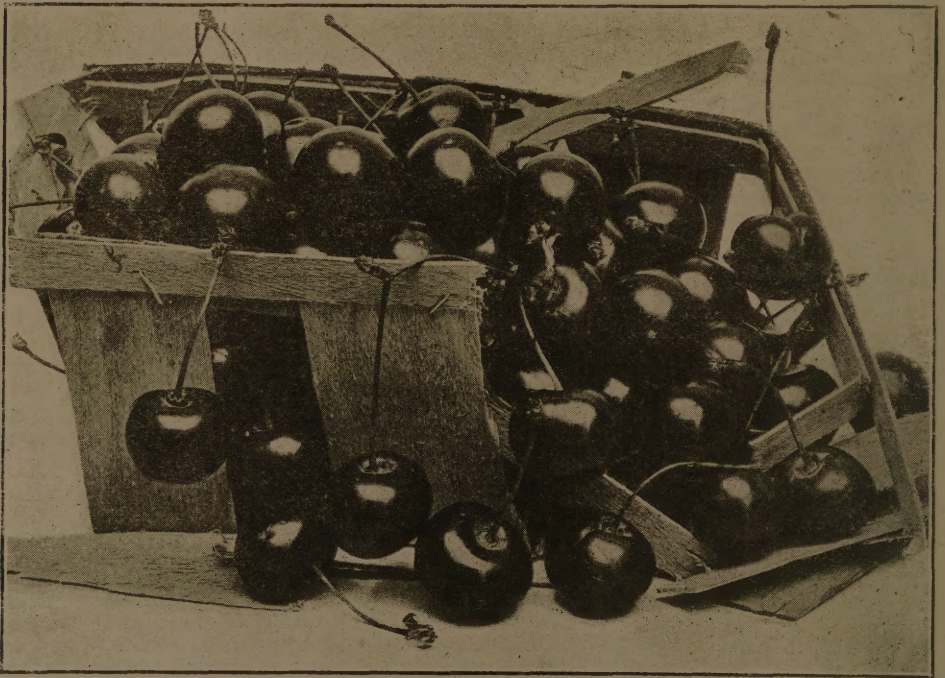
DUKE AND MORELLO CHERRIES.

These two classes of cherries are very distinct from the preceding. The trees are of smaller size, and grow more slowly; the leaves are thicker and more erect, and of a deeper green. The fruit is generally round, and in color varying from light red to dark brown.

The Dukes have stout, erect branches usually, and some of them, like Reine Hortense, quite sweet fruit; while the Morellos have slender, spreading branches, and acid fruit invariably. These two classes are peculiarly appropriate for pyramids on the Mahaleb stock, and their hardiness renders them well worthy of attention in localities where the Heart and Bigarreau are too tender.

Baldwin—Originated in Kansas. Remarkable for earliness, vigor, hardiness, quality and productiveness; fruit fully one-third larger than early Richmond; bright red in color; flavor slightly sub-acid, yet one of the sweetest and richest of the Morello type. Tree an upright grower. The bloom of Baldwin, a pure white, turning to pink similar to the Hydrangea, makes this variety very attractive. It is endorsed by many prominent horticulturists.

- Dychoase**—Partakes of both the Duke and Morello in wood and fruit; a very early and sure bearer; ripens a week before Early Richmond, of better quality, and quite as productive. June.
- Early Richmond**—An early red, acid cherry; very valuable for cooking early in the season. Ripens through June. Tree a free grower, hardy, healthy and very productive.
- Empress Eugenie**—Large, dark red, flesh juicy, rich. Tree robust and very productive. A grand variety; can recommend from our own testing.
- English Morello**—Large, dark red, nearly black; tender, juicy, sub-acid, rich: tree dwarf and slender; makes a fine bush on the Mahaleb. If trained on a north wall, it may be in use all the month of August.
- Late Duke**—Large; light red; late and excellent. Tree robust, and makes a nice dwarf or pyramid. Valuable. End of July.
- May Duke**—The most popular and valuable of all the Duke cherries; equally good for dessert or for cooking purposes, and universally and deservedly popular. Fruit large, heart-shaped; skin, when fully ripe, deep red; flesh tender, melting, rich and finely flavored; tree vigorous, hardy and very productive; ripens gradually through June.
- Montmorency Large Fruited**—No doubt one of the finest acid cherries; tree very hardy and an immense bearer; commences to fruit while young, and is loaded annually thereafter with fine crops; fruit of good size, fine flavor and of bright, clear, shining red; valuable everywhere, especially for northern latitudes; about a week later than the Early Richmond.



Montmorency Cherries.

- Olivet**—This variety promises to be of the greatest value. Differing from nearly all other early sorts, it is a very shining deep red, and continues fruiting through most of June and July without losing its quality. Fruit large; flesh red, with rose-colored juice, tender, rich and vinous, with mild, sub-acid flavor; as fertile and productive as the best of the Duke sorts, and probably the largest of this class.
- Wragg**—Supposed to hail from North Germany; very hardy. The tree is a good grower and an immense bearer; fruit a dark liver color, juicy and rich.

RUSSIAN CHERRIES.

- Bessarabian**—New Russian cherry of considerable merit; small stone; color dark red. Sub-acid. Tree a vigorous grower.
- Lutoyka**—Another new Russian importation of great merit. Fruit very dark red, almost black when fully ripened. Tree extremely hardy and of great value for all cold sections.
- Ostheim**—Large, roundish, obovate; flesh liver color; tender, juicy, almost sweet, sub-acid; very good. It has been tested in the severest winters of Minnesota and found to be perfectly hardy. Middle of July.
- Vladimir**—Is beyond doubt the hardiest of really good cherries in the world. Low and bushy in growth; fruit about the size of Richmond; flesh purplish red; color when ripe nearly black; when fully ripe nearly sweet.
- The Compass Cherry**—Originated in Minnesota. A cross between the Rocky Mountain Cherry and the Native Plum and resembles both. The most remarkable fruit of recent origin; hardy as any wild plum; sweet, juicy, and excellent flavor; marvelously abundant bearer; bears second year after planting; grows on any soil; good shipper and fine cooker. The only cherry that is perfectly hardy in Manitoba, Saskatchewan and Alberta.

SELECT PLUMS

The Plum attains its greatest perfection on a strong clay soil, where they grow the most thriftily and suffer the least from the "curculio" and "black knot," and as is the case with all other fruits, they are greatly benefited by thorough cultivation.

There is no difficulty in protecting the crop of Plums from the attacks of the curculio by giving it a little extra care. This should be done as follows: Immediately after the trees have done blossoming, and when the fruit is in its first stages of growth, make the ground clean and smooth under each tree, and spread a sheet upon it, so that it will extend as far as the outside edge of the outer branches, and then suddenly jar the tree, so as to shake down all the stung fruit and insects, which should be destroyed. If this operation be carried on daily for a short time it will insure a full crop of this delicious fruit, and will repay the little daily attention given it. It is very important that this should be done early in the morning.

Standard trees are generally from four to six feet, and should be encouraged after planting to form branches low down, or near the ground, and by this means low-headed trees will be secured.



Bradshaw Plums (Reduced). (See page 34).

- Bradshaw**—A very large and fine early plum; dark violet red, juicy and good. Tree erect and **vigorous**; very productive; valuable for market.
- Coe's Golden Drop**—Large and handsome; oval; light yellow; flesh firm, rich and sweet; adheres to the stone. Tree a **moderate** grower and very productive. Valuable not only on account of its large size and fine appearance, but its lateness. Last of September.
- Fellenberg** (French or Italian Prune)—A fine late plum; oval; purple; flesh juicy and delicious; parts from the stone; fine for drying. Tree a **free** grower and very productive. September.
- Field**—A seedling of Bradshaw, and closely resembles its parent. Is ten days earlier than Bradshaw, which adds much to its value; same large size; darker and withstands severe cold.
- General Hand**—Very large; yellow, handsome; parts freely from the stone. Tree **stocky**, vigorous and productive. September.
- German Prune**—Medium; oval; purple or blue; juicy, rich, fine. Tree **vigorous** and very productive. September.
- Geulii**—Fruit very large; deep bluish purple, covered with thick bloom; flesh yellowish green, coarse, sweet and pleasant; great bearer and very early. Tree a hardy and rapid grower. This new variety is regarded as very valuable for market by growers along the Hudson River. First to middle of September.
- Glass Seedling**—Fruit large, ovate; suture large and broad, one side often enlarged; stock of medium strength, slender; cavity large; skin dark purple, almost black, with a thin blue bloom; flesh greenish yellow, a little coarse, moderately juicy, sweet, good; separates freely from the stone. Ripens in September.
- Grand Duke**—Same color and size as Bradshaw, ripening latter part of September. Entirely free from rot; one of the best late market plums ever offered by us; speckled, parting easily from the stem; soft, juicy and of good quality; peachy flavor. Ripe from 10th to 15th of September. Tree a good bearer and fruit of large size. One of the most promising of the new plums.
- Hudson River Purple Egg**—Fruit long, large and oval; color red to purple red, covered with numerous small dots; skin thick; flesh greenish yellow, and firm; quality good. Season medium.
- Hughes Seedling**—A valuable variety, originating in Toronto, to which our attention has been directed for some time. The tree is a strong, vigorous, upright grower and very hardy; an annual bearer. Fruit large as Yellow Egg; a little elongated; skin deep yellow, sometimes splashed with red on the sunny side; flavor first-class; juicy, melting, sweet; free stone; ripens early September.
- Improved Lombard**—Ten days earlier than the Lombard; better in quality. Does not grow in clusters, and not so liable to rot. Hardy and prolific.
- Imperial Gage**—Rather large; oval; greenish; flesh juicy, rich and delicious; parts from the stone. Tree a **vigorous** grower, very productive and one of the best of plums. Middle of August.
- Klondyke**—So named on account of its extreme hardiness. A handsome, late red plum, covered with deep blue bloom; almost round in shape; of very large size; meat rich, sweet and delicious. Tree a good grower and very productive. Is especially adapted to northern sections. Has been thoroughly tried at the testing farms and proves a valuable acquisition to the plum list.
- Large Golden Prolific** (Vail's Seedling)—A plum of Canadian origin, a seedling of the Yellow Egg. Fruit large golden yellow of fine quality; season August. The fruit resembles its parent, the Yellow Egg, although the tree is more spreading in habit, more hardy and much more productive. A very valuable plum.
- Lombard**—Medium size; oval, violet red; flesh yellow, juicy and pleasant. Tree very **vigorous**, a **great bearer**, and peculiarly well adapted to light soil. September.

Monarch—This is a late variety, ripening from last of September into October. Fruit very large, roundish oval. In color, dark purplish blue; freestone. Of excellent quality. The tree is very hardy; growing straight and stocky. All things considered, it is a very valuable sort.

Moore's Arctic—Size medium or below; skin purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet and pleasant flavor. Charles Downing speaks of it as follows: "A new, hardy plum, which originated on the high lands of Aroostook County, Maine, where, unprotected and exposed to cold, it has for many years borne enormous crops and is claimed to be the hardiest plum grown, and so far free from black knot. Tree healthy, vigorous, an early and abundant bearer."

Niagara—Of extra large size and first-rate flavor; color dark blue; good bearer, not liable to rot. Ripens about August 1st. It is one of the most profitable varieties to grow, and ranks very high.

Pond's Seedling or Font Hill—A magnificent English plum; form of Magnum Bonum; light red, changing to violet; flesh rather coarse. Tree a vigorous grower and most abundant bearer. One of the most attractive in cultivation. September.

Reine Claude (Reine Claude de Bavay)—One of the best foreign varieties. As large as the Washington, and of fine flavor; roundish oval; greenish, marked with red in the sun. Tree a free grower and remarkably productive. Middle to end of September. Hangs long on the tree.

Quackenboss—A popular Hudson River variety; large deep purple; flesh greenish yellow, juicy and sweet, with a sprightly flavor; good. September.

Shipper's Pride—Originated in the State of New York, near Lake Ontario. An unusually thrifty grower, and stands our coldest winters without injury. Very productive; the original tree having never failed to produce a good crop since it was old enough to bear. Fruit of large size and nearly round; color handsome dark purple; quality fine, juicy and sweet; excellent for canning, and an unusually good shipper. Ripens from first to middle of September; a splendid market plum.

Shropshire Damson (or Prune Damson)—An English variety of great merit for preserving. Large, and much more desirable than the common Damson. Tree a vigorous grower, very free from attacks of curculio; hardy and an abundant bearer. October.

Tennant Prune—Good size; oval, dark red in color; flesh yellow; juicy and very pleasant. Tree a vigorous grower and great bearer. September.

Washington (Bolmar's Washington)—All things considered, this is one of the finest and most popular plums. Fruit very large, roundish oval; skin yellow, with a slight crimson blush in well ripened specimens; flesh very sweet and luscious. Tree vigorous, with broad, handsome foliage; very productive. Last of August.

Yellow Egg (Magnum Bonum Yellow)—Very large and beautiful; yellow; flesh deep yellow, a little coarse for cooking; vigorous and productive. Middle of August.

JAPAN PLUMS.

This race is as distinct from our European and Native varieties as is the Le Conte Pear from the Bartlett. The trees somewhat resemble the vigorous varieties of the Chickasaw Plum type, but the foliage is large and quite distinct. Some are hardy as far north as where the Wild Goose succeeds, and for the South they open up a new era in plum culture. There are quite a number of varieties, but the confusion in nomenclature as given by the importers is so great that we select only those that are distinct and well proven, and combining the excellencies of their class.

Abundance—A remarkable fruit; unlike any other plum. In growth it is so strong and handsome as to render it worthy of being planted as an ornamental tree—equalling in thrift and beauty Kieffer pear, which it **even excels** in early and profuse bearing. It is exceedingly hardy. Its propensity for early bearing is such that it loads in the nursery row, bending the limbs with the weight of fruit until they sometimes break, and this is the case every year—the curculio having no effect upon it, the eggs failing to hatch and produce the destructive grub the same as with the Spaulding. The fruit is large, showy and beautiful. Amber, turning to a rich bright cherry color, with a decided white bloom, and highly perfumed. Flesh light yellow, exceedingly juicy. Stone small, parting from flesh readily. Its season is very early, ripening in advance of other varieties, which also makes it of special value.

Burbank—An exceedingly valuable sort that is proving a great favorite among all planters. A very vigorous grower, usually producing a crop second year after transplanting. Color exceedingly brilliant, crimson purple; very handsome and rich in flavor. Hardy; one of the best for both garden and market. August.

October purple—A large, dark purplish, heart-shaped, or somewhat oblate plum, with yellow flesh, of good quality; clingstone—very late.

Red June or Red Nagate—One of the best of Japan plums. Tree hardy and good bearer. Flesh yellow, excellent quality; cling. Ripens very early. A good market variety.

Shiro—Large, roundish, yellow, handsome, juicy, rich, quality good, skin tough, so good shipper. Season early, about the same time as Abundance.

Willard—Medium in size, spherical in general outline, but prominently cornered

or angled, never pointed, the sinus very slight, but stem cavity deep; color dark, clear red, with many minute yellow dots; flesh rather firm, yellow, sweet, and of fair quality; freestone. A strong, vigorous, hardy tree, productive; ripening in Central New York late in July.



Branch of Americana Plums.

AMERICANA, CHICKASAW AND NATIVE PLUMS.

This class includes a number of groups of American or native plums that are exceptionally well adapted for those sections of country which are too cold for the domestic and Japan varieties. These plums do exceedingly well in the northern portions of Ontario, Quebec, Manitoba, Saskatchewan and Alberta.

Although there are many hundred varieties in existence, in this group of plums, we only offer such varieties which have been found of most value commercially, both in regard to quality of fruit, productiveness, and hardiness.

- De Soto**—Fruit oval, very slightly compressed; size medium, cavity shallow; stem medium long; color orange heavily overlaid with crimson, dots many, reddish; bloom blue; skin thick; flesh yellow, firm; stone oval slightly flattened; cling; quality superior; season, September. Probably the most generally known plum of the American group; quality unsurpassed and productiveness is great.
- Downing** (Charles Downing)—Fruit round oval; size large; cavity medium depth, rounded; stem slender; suture a faint line; apex very slightly depressed; color bright solid red; dots many, minute; bloom thin, bluish, skin thin; flesh yellow; stone medium size, oval, flattened, cling; quality good to fine. Grown by H. A. Terry, of Iowa, from seed of Wild Goose, fruiting first in 1885. One of the best varieties of this group.
- Hammer**—Fruit round-oval; size medium to large; cavity very shallow; color crimson, dots many, minute and a few larger, yellow; blue bloom, skin thick; flesh yellow; stone small round, slightly flattened, free; quality very good; season, after Wolfe and Weaver. A fine variety.
- Hawkeye**—Fruit round, oval; size large; cavity very shallow; stem rather long; color dull red over yellow; dots many, minute; bloom thick blue, skin thick; flesh yellow; stone size large, oval, flattened, cling; quality good to best; season, same as De Soto. Good for market or home use.
- Milton**—Large; round-oblong; dark red; cling. July 1st to 10th. Tree, vigorous, resembling Wild Goose in appearance; very productive. This is regarded as the most valuable market variety in this group.
- Pottawatomie**—Perfectly hardy and an immense early annual bearer; fruit is yellow, overspread with bright pink and prominent white dots; flesh yellow, luscious, good, ripens in July.
- Stoddart**—Fruit oblique oval; size large; cavity none; stem short and stout; color pinkish red over yellow covered with many small white dots; bloom bluish; skin very thick; flesh yellow; stone medium to large, round oval, flattened, cling; quality good; season, medium early; does well almost everywhere. Apparently one of the best and most reliable of this group, and very hardy.
- Wayland**—Slightly above medium size when at its best, round oblong, bright pinkish red; cling. Season, Aug. 20th to Sept. 5th, some seasons later. Tree, vigorous, upright grower while young, assuming weeping habit when older, large, bright and healthy.
- Weaver**—Fruit oval; compressed; size large; cavity medium deep, rather abrupt; suture rather prominent; color orange heavily overlaid with red; dots many, minute; bloom bluish; skin thick; flesh firm, yellow; stone large, elliptical, pointed, flattened, half-free; quality good; season medium late; tree a strong upright grower, productive. Has been widely distributed and is a good reliable variety.

SELECT PEACHES

The ease with which Peach trees may be cultivated, their comparative freedom from disease, the short period before they become productive, with the immense demand for the fruit, and the facility with which it may be shipped to distant markets, makes peach growing extremely profitable.

To secure healthy, vigorous and fruitful trees, the ground must be kept clean and mellow, and it should receive an occasional dressing of wood ashes. It should be remembered that peaches are all borne on wood of the previous season's growth, and that this makes it absolutely necessary to prune the trees yearly to remove the dead branches and let in light and air, and keep the trees in good shape to produce bearing wood. The trunks ought not to exceed three feet in height.

"F" indicates Freestone; "C" indicates Cling.

- Admiral Dewey (F)**—Introduced by J. D. Husted, the well-known originator, amongst other varieties, of Husted's Early, Early Michigan and Triumph Peaches. He has devoted many years to scientific crossing and breeding for improved varieties. Every new kind introduced by him has stood the test of practical trial, and maintained all the merits claimed for them. His latest introduction, "Admiral Dewey," marks a great advance in early peaches. It is a perfect freestone; flesh yellow, of uniform color and texture to the pit. Hardy and productive. Tree a strong symmetrical grower, and as near perfection as we can obtain in a single variety.
- Alexander (F)**—Originated near Mt. Pulaski, Ill. Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy, sweet; tree vigorous and productive. Ripens early in July.
- Banner**—Tree a good grower, exceedingly hardy in both wood and buds, bears young, is very productive. Fruit large, deep yellow with crimson cheek; flesh yellow, excellent quality, rich, firm; equal to any as a keeper and shipper. A profitable late market variety. Last September.
- Carman**—A remarkably attractive and luscious peach, large and broad, oval-shaped, yellowish white; flesh creamy white, with red tinge, spicy and good. Especially suited to low, wet land. Very hardy and productive every year. Free. This is a favorite variety with many growers, as it is one of the most profitable ever introduced. The fruit stands shipping so well that it always reaches market in prime condition and its handsome appearance causes it to bring the highest prices. Season end of August.
- Champion (F)**—Early; good bearer; skin creamy white, with red cheek; strikingly handsome. Tree perfectly hardy and productive. Size large, and an excellent shipper.
- Crawford's Early (F)**—A magnificent large yellow peach, of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts; no other variety has been so extensively planted. First of September.
- Crawford's Late (F)**—Fruit of large size; skin yellow, or greenish yellow, with dull red cheek; flesh yellow; tree vigorous, moderately productive; one of the finest late sorts. Last of September.
- Crosby (F)**—A true iron-clad; ripening between early and late Crawford. Tree vigorous and low-headed. Fruit medium in size, bright orange yellow, splashed with streaks of carmine on sunny side. A sure cropper.
- Early Rivers (F)**—Large; color creamy white, with a delicate pink cheek; flesh melting, with a remarkably rich, racy flavor. Larger and ten days later than Alexander. One of the finest of all peaches for home use or near-by market.
- Elberta (F)**—Large, yellow, with red cheek, juicy and high flavor; flesh yellow; supposed to be a seedling of Chinese Cling. Ripe September, about a week later than Early Crawford; an excellent shipping variety.
- Engle's Mammoth (F)**—Large, round, oval; suture slight; yellow with red cheek; flesh yellow, stone small, free; sweet, rich, juicy. Early September. A good market sort.
- Fitzgerald (F)**—The Fitzgerald Peach is a chance seedling, found at Oakville, Ont., fully outside the peach belt of Canada, and in a section where peach growing as a business can never be profitably engaged in. The fruit is of a very large size, exceeding that of the Early Crawford. Its quality is infinitely superior, while as a cropper it far excels the Crawford in every way, and most other varieties. One strong point is the smallness of the pit, being the smallest of that of any peach that we know of. The location in which it was found demonstrates its hardiness, and it has another strong quality of fruiting very early. At our nurseries the location is not the best suited for peach growing, and we have been unable to do anything with Crawfords, but with the Fitzgerald the fruit buds are much more hardy, and in fruiting it has given the best of satisfaction. Four of these peaches placed in the scale brought down a 2-lb. weight.



Fitzgerald Peach.

Garfield or Brigdon (F)—Originated in Cayuga Co., N.Y. Flesh yellow; very rich and juicy; color deep orange red. Middle of September.

Gold Drop (F)—Large, yellow; freestone; good quality; splendid late market sort. Ripens close after Crawford's Late. A very heavy bearer.

Greensboro (F)—A wonderful new variety, originating in Greensboro, N.C., ripening earlier than Alexander and double its size. It is a great bearer, the tree being annually loaded with fruit, which is large, yellowish white, beautifully colored with crimson cheek; flesh white, very juicy and of fine quality; skin thin and rubs off easily. It differs also from most early peaches in being entirely free from rot. It is a great surprise to behold peaches of such large size ripening before Alexander in such abundance, and in quality among the best.

Kalamazoo (F)—Large golden yellow, with crimson cheek; flesh thick, yellow; superb quality, small pit. Strong grower, early bearer; hardy and productive. Between Early and Late Crawford.

Lemon Free (F)—Large, yellow, late; Originated in Ohio. Very productive.

Mountain Rose (F)—Large; red; flesh white, juicy, rich and excellent; one of the best early peaches. Should be in every collection. First of August.

New Prolific (F)—A new peach from Michigan; very large; prolific; of finest quality; ripening latter part of July—just before Early Crawford; yellow, with a blush; rich, juicy, fine quality; one of the greatest market varieties.

Smithson—Very large size; yellow flesh, freestone. An excellent shipper and ripens late, just before Smock. Regarded as one of the most profitable peaches in the Niagara district.

Smock (F)—Large size; light orange yellow, with red cheek; flesh yellow, juicy, rich and free from the stone. Ripens in October.

Triumph (F)—A great improvement upon Alexander, with which it ripens, blooms late; has large flowers, and is a sure and abundant bearer, makes a very strong growth, and comes into bearing early. The fruit is large, with very small pit, yellow, with mottled crimson cheek, very handsome; flesh yellow, and ripens evenly to the stone; firm in texture, and exceedingly fine in quality, and is a perfect freestone. Such a variety is valuable in the highest degree for market, and every garden should contain a few trees of it for its home supply of fine, large, early peaches.

Wellington (F)—A seedling originating in Toronto. Similar to Hill's Chili, but larger and more productive. A beautiful large peach. Flesh yellow and quite free. Skin yellow, deeply splashed with red.

Yellow St. John (F)—Size medium; skin yellow, with dark red cheek; flesh yellow, freestone; good. Ripe early in July.

SELECT APRICOTS

A delicious fruit of the plum series, valuable for its earliness. It is liable to be attacked by curculio, and requires the same treatment as the plum; it bears immense crops, ripening in July and August.

Montgamet—Large, early; one of the best. Flesh firm, juicy and excellent. The best for eating out of hand. Tree very productive, and promises to become a great favorite for Canadian culture.

QUINCES

The Quince is generally well known and highly esteemed for cooking and preserving. It thrives best in a deep, rich soil, and is benefited by a clean, high cultivation. It is said to be improved by the application of salt in small quantities. The Quince is usually sold at the age of two or three years, and is from three to four feet in height.

VALUE FOR MARKET.

The fruit is very profitable, as it requires but little space, and is very productive. Planted at ten feet apart each way, we have 435 trees per acre. A low estimate of the yield of an acre of quinces would be 200 to 250 bushels, which at a very low price would bring more than \$500.

Apple or Orange—Large; bright golden yellow. One of the best and most desirable quinces in cultivation.

Bourgeat—Large, golden, good quality; a strong grower. Ripens shortly after Orange, and keeps until mid-winter.

Champion—Fruit very large, fair and handsome. Tree very productive, surpassing any other variety in this respect; bears abundantly while young, flesh cooks as tender as the apple, and without hard spots or cores.

Meech's Prolific—A valuable new quince, remarkable for its early and regular bearing and great productiveness. The fruit is of good size and form and beautiful color; it is shaped like a handsome pear, with smooth, fine skin, of bright orange yellow; flesh very fragrant, delicious and tender. Unsurpassed for cooking.

Rea's (Rea's Mammoth)—We consider this the best of all quinces. The largest and in every respect the finest variety of the quince. A strong grower, very productive.

SELECT GRAPES

("B" for Black; "R" for Red; "W" for White.)

The grape is the most healthful of all fruits, and the most highly esteemed for its many uses. It can be grown by everyone who has a garden, a yard or a wall. It can be confined to a stake, bound to a trellis, trained over an arbor or extended until it covers a large tree or building, and still it yields its graceful bunches, and luscious, blooming clusters. Capable of most extraordinary results under wise management, it is prone also to give the greatest disappointment under bad culture or neglect. Other fruits may be had from plants that know no care; but grapes are to be had only through attention and forethought. We will endeavor to point out a few essential points in its successful culture, and refer the cultivator to other and more extended works for more details.

Soils.—Good grapes are grown on various soils; sandy, clayey, loamy, etc. The soil must be well drained, however, and always bear in mind a sunny exposure is preferable. In order to bring this fruit to perfection, it must have an abundance of sun. Hill-sides that are often difficult to utilize, and in fact unsuitable for other crops, are good for grapes.

Crops.—Vines should be planted eight to sixteen feet apart. A top dressing of manure in the spring will benefit them greatly, and in order to secure good results annual and careful pruning is needed. A vine is capable of bringing only a certain amount of fruit to perfection, proportioned to its size and strength. To secure the best results, beginning with a vine two or three years old, such as we deliver, allow it to grow the first year without pruning. In the fall, when the wood is thoroughly ripe, prune severely, cutting back nearly to the ground, bearing in mind you should never cut too close to the bud, but leave an inch or two of wood beyond. In this first pruning, not more than three or four buds should remain. The following spring these buds should again be reduced, allowing only two of them to throw out shoots. By the fall these will have attained a good growth, but should be cut back to about four feet, and in the spring following these two shoots may be fastened horizontally to the lower part of the trellis. The uprights should be from ten to twelve

inches apart, and more buds than this should not be allowed to grow. It is not advisable to let the vine bear too heavily at first, as an over-crop is usually a disastrous one. In the fall, when the leaves have fallen and the wood is thoroughly ripe, the upright canes may be cut back to two or three buds, and this treated as the previous year. Following this system each year will bring an abundance of well-matured fruit, and keep the vine healthy and strong. In order to illustrate this method, we give a cut of a vine properly cared for.

Gathering and Keeping—Grapes for keeping to be used in their fresh state should be allowed to remain upon the vines until perfectly matured, but not much longer. Pick them when perfectly dry. Let them stand in open baskets or boxes for about ten days in a cool, dry room; and after sorting out all decayed or imperfect berries, pack them in shallow boxes and cover closely. Use no paper, but basswood or elm boxes, if convenient. Pine and other resinous wood should not be used, as they flavor the fruits disagreeably. After packing, keep the boxes where it is both cool and dry. Under careful management some varieties may be kept until spring.



Time of Ripening—Very little can be said about the exact season of ripening grapes in Canada, owing to climatic changes. Indeed, the season varies but little in any event. The season opens with Champion. Next comes Campbell's Early and Moore's Early, followed by Worden and Delaware. All others ripen near the time of Concord, about a week later than Worden. September is the month for grapes.

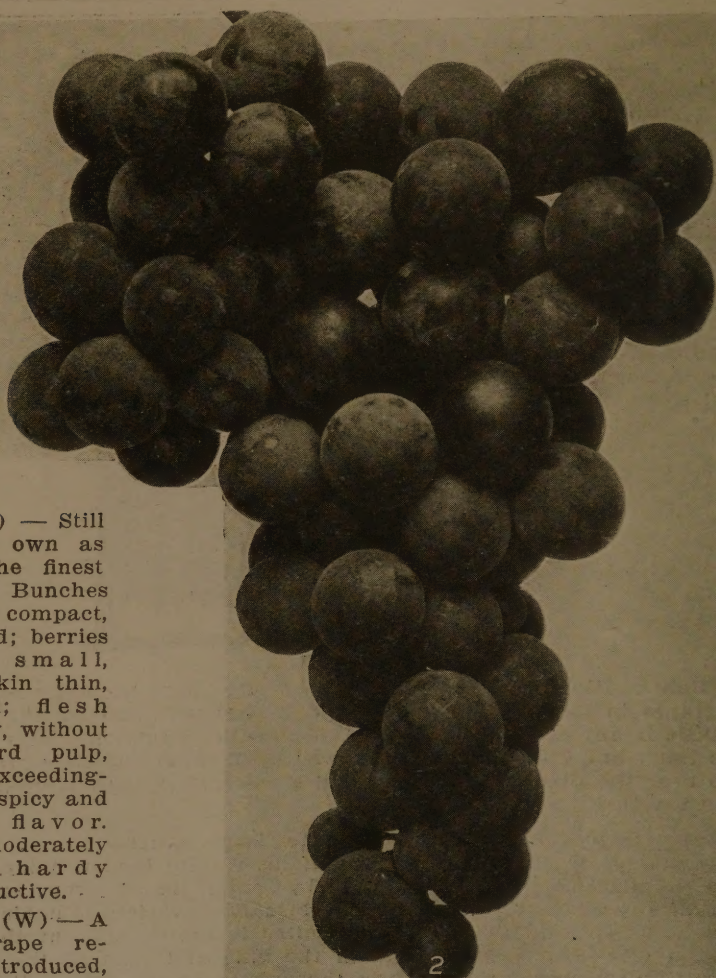
Agawam (Rogers' No. 15) (R)—Bunches large, generally loose; berries large, round; color dark red or maroon; flesh quite tender, juicy, vinous, with a peculiar flavor, much admired by some; vine vigorous and productive. Like the others of Mr. Rogers' Hybrids, this variety is liable to mildew in cold, damp locations, and is not suited to the extreme north.

Brighton (R)—Our experience with the vine and fruit of the Brighton has convinced us more and more thoroughly of its superiority as a family grape. Its remarkable vigor and hardiness of vine, large, compact bunches, rich wine shade of the ripened berry, delicate skin, tender, almost seedless pulp, sugary juice and rich flavor, are combined qualities that are not united to such a degree in any other sort with which we are acquainted. It ripens a week or ten days before the Delaware, and bears most abundantly; having thick large foliage, it is enabled to withstand the heat of the summer, and being a vigorous grower, it exhibits extreme hardiness, and is enabled to endure the winter in extreme localities. We recommend this sort especially as a standard variety for the vineyard or garden.

Campbell's Early (B)—The king of American grapes. A very strong vigorous, hardy vine, with thick, mildew-resisting foliage, and perfect, self-fertilizing blossoms. Clusters very large, usually shouldered, compact and handsome; berries large, nearly round, often an inch or more in diameter; black, with light purple bloom. Season very early, ripening from the 15th to last of August. Has remarkable keeping qualities. As a keeper and shipper it is unequalled by any other American grape.

Champion (B)—A large grape, of medium quality; a strong grower and very hardy; the earliest of all; succeeds in all sections, and this makes it a valuable market grape.

Concord (B)—A large, handsome grape; very hardy and productive. Succeeds over a great extent of country, and although not of highest quality, is one of the most popular market grapes.



Delaware (R) — Still holds its own as one of the finest grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor. Vine moderately vigorous, hardy and productive.

Diamond (W) — A white grape recently introduced, and undoubtedly very valuable. A cross between Concord and Iona. A vigorous grower, with leaf resembling the Concord, very free from mildew. Bunch large, well filled, moderately compact, berry about size of Concord; flesh melting and juicy, sweet to the centre, and free from foxiness; skin thin, but sufficiently tough to bear packing and handling well. Ripens about with Delaware. Very productive.

Campbell's Early Grape (Reduced). (See page 41).

Eaton (B) — Leaf large, thick, leathery, covered on the under side with a thick, brownish yellow down. Bunch very large, weighing from 12 to 25 ounces; compact, often double shouldered; berries very large, many one inch in diameter, round, black, covered with a heavy blue bloom; adheres firmly to the stem. Seeds large, from one to four; skin thin, but tough, with no bad taste when eaten close; pulp quite large, tender dissolving easily in the mouth. Very juicy, as good or better quality than the Concord, much less of the native odor. Ripens with the Concord or a little earlier.

Gaertner (Rogers' No. 14) (R) — Bunch large; berry very large, round; skin thick; color a beautiful light red, with bloom; fruit almost transparent; pulp tender, sweet, pleasant, rich. The most showy grape in our collection. Vine vigorous and productive. Desirable either for garden or vineyard.

- Green Mountain or Winchell (W)**—Color greenish white; skin very thin; pulp exceedingly sweet; contains but one or two seeds, which separate from the pulp with the slightest pressure; quality superb. This extra early delicious grape originated in the mountains of Vermont, has been tested for several seasons, and is proving the very earliest white grape known, while the quality is superb, the vine hardy, vigorous and productive.
- Herbert (Rogers' No. 44) (B)**—Bunch rather long; but compact; berry large, tender, sweet and rich; early and productive. A handsome variety and one of the best of the Rogers' in quality.
- Lady (W)**—Said to be a seedling of the Concord. Bunch medium; berry medium to large; skin thin; color light greenish yellow, with white bloom; pulp tender, sweet and pleasant. Vine hardy and vigorous. A valuable early white grape.
- Lindley (Rogers' No. 9) (R)**—Bunch medium, somewhat loose; berry medium to large, round; color a rich shade of red, rendering it a very handsome and attractive grape; flesh tender, sweet, with a rich aromatic flavor; ripens soon after the Delaware; vine vigorous and productive. It sometimes fails to set a full crop. We regard it as one of the best grapes in our collection.
- Massasoit (Rogers' No. 3) (R)**—Bunch medium, rather loose, as the fruit does not always set well; berry medium, brownish red; flesh tender and sweet; very good; one of the best flavored of the Rogers'. A desirable early garden variety.
- Moore's Early (B)**—Raised from seed by John B. Moore, Concord, Mass., in 1872. Bunch large; berry round (as large as the Wilder or Rogers' No. 4); color black, with a heavy blue bloom; quality better than the Concord; vine exceedingly hardy; has never been covered in winter, and has been exposed to a temperature of more than twenty degrees below zero without injury, and it has been entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, and more particularly adapts it to northern sections, maturing as it does before Concord.
- McPike (B)**—A new black grape, said to be a seedling of the Worden, and to produce berries of great size.
- Niagara (W)**—This white grape originated at Lockport, N.Y., in 1868, and is a cross between the Concord and Cassidy; first fruiting in 1872; it has since regularly borne large crops of fine fruit. The vine is a remarkably strong grower and very hardy; the leaves are thick and leathery and dark glossy green; bunches very large and uniform and very compact; berries as large or larger than Concord, and skin thin but tough, which insures their shipping qualities; quality good, very little pulp, melting and sweet to the centre; ripens before Concord.
- Pocklington (W)**—Bunch medium to large; berry large, round, of a rich yellow color; flesh pulpy, juicy, and of good quality; ripens at the time of the Concord; vines vigorous, healthy, very hardy and productive. Though not of the highest quality, it is considered a very valuable and reliable variety, and is constantly growing in favor.
- Salem (Rogers No. 22) (R)**—Bunch large and compact; berry large, of a light chestnut or Catawba color; thick skinned, perfectly free from hard pulp; very sweet and sprightly, with a most exquisite aromatic flavor; as early as the Delaware, having never failed to ripen in the most unfavorable season for the past six years; keeps well.
- Vergennes (R)**—This is a chance seedling found in the garden of Mr. William E. Green, Vergennes, Vt. Foliage downy and free from mildew; very productive; clusters large; berries large, holding firmly to the stems; color light amber; flavor rich and delicious; flesh meaty and tender; is an excellent late keeper.
- Wilder (Rogers' No. 4) (B)**—Bunch very large, compact, shouldered; berry large, round, black; flesh tender, slight pulp at centre; juicy, sweet. Ripens about with Concord. Vine vigorous, hardy and a good bearer. Regarded as one of the best of the black varieties, and on account of the size and beauty is very valuable for market.

Worden (B)—Said to be a seedling of the Concord. Bunch large, compact, handsome; berries large—larger than those of the Concord. It ripens a few days earlier, and is superior to it in flavor. Destined to become very popular for the vineyard and garden.

Wyoming Red (R)—An extra early red grape, resembling the Delaware in appearance, but double in size and ten days earlier. Bunch small, compact and handsome; berry medium, bright red; skin thin and firm; flesh sweet, a little foxy, but not enough to be objectionable. Much in demand as an early profitable grape.

GRAPES FOR CULTURE UNDER GLASS.

Black Hamburg—Considered one of the finest for greenhouse culture. Bunches large and mostly with two shoulders; berries very large; skin thick, deep brownish purple, becoming almost black at maturity. Flavor very sugary and rich. A good and regular bearer.

Foster's White Seedling—Bunches large; sets well; berries above medium, roundish oval, yellowish amber. Flesh, tender, melting, sweet and rich flavored.

Lady Downes—This ranks among the most valuable of this class. Ripens its fruit well, which hangs for a long time. Bunches large, rather loose, shouldered; berries above medium, roundish, oval; skin rather thick, reddish purple, becoming quite black, with a delicate bloom; flesh dull white, fine, sweet and richly flavored.

SELECT RASPBERRIES

Coming immediately after strawberries, when there is a dearth of other fresh fruits. Raspberries are equally desirable for planting in the garden for home use, and in the field for market. They are easily cultivated. Beds seldom require renewing. Their season for ripening is long. The fruit bears transportation well, and aside from the demand for it for immediate consumption, it brings highly remunerative prices for drying and canning.

Plant in good soil, and manure from time to time freely. The hills should not be less than four feet apart each way. Cut out the old and weak shoots each year, preserving not over six for fruiting. If the location is so much exposed that the plants are inclined to kill down seriously, they may be bent over in the fall, on mounds of earth formed at one side of the hills, and covered sufficiently to keep them down until spring. Surplus suckers take strength from the bearing plants. They should be cut away or hoed up frequently.

Class I.—Red and Yellow Varieties.

Columbian—One of the greatest raspberries in existence. Original plant bore over 28 quarts of fruit. Plant a giant in growth, very hardy; fruit large, dark red, rich, juicy and delicious flavor. Excellent for canning. Fruit does not drop from bush. A splendid shipping variety. Has produced over 8,000 quarts to the acre. Two first premiums at Western New York Fairs.

Cuthbert (Queen of the Market)—Large, conical; deep, rich, crimson, firm; of excellent quality. A vigorous grower, entirely hardy and immensely productive.

Golden Queen—This variety is a seedling of the Cuthbert, but the color of the fruit is a rich golden yellow. The flavor is of the highest quality, pronounced by some superior to the Old Brinkle's Orange, the finest flavored of all the raspberries. In size equal to Cuthbert; immensely productive; a very strong grower, and hardy enough even for the extreme northern latitudes, having stood uninjured when even the Cuthbert suffered. The desire for a yellow raspberry of high quality, combined with vigorous growth and perfect hardiness, is believed to be fully met in this variety.

Herbert—A large early red Raspberry, originated at Ottawa. Very productive and hardy, especially adapted for northern districts and North-Western Provinces, having been very successfully grown in the Temiskaming country, in the coldest part of New Ontario. A very strong grower, good cropper; fruit large to very large, bright to deep red; moderately firm, juicy, slightly sub-acid, good flavor, and very good quality.

King—The "King" is the earliest red variety; its fruit of the brightest crimson and best of quality, equalling in this respect the popular Cuthbert as well as in size, and it is a very much firmer berry and better shipper than that grand old variety. It unites large size, bright and beautiful color, firmness, and high quality of fruit with productiveness, vigorous growth and hardness of cane. In productiveness, vigor of cane, hardness and endurance of heat and drought it has few equals. In value it is without an equal among red varieties. "King" has stood uninjured when the mercury has dropped to 25 degrees below zero, suffering no injury whatever. Its extreme hardness recommends it for our Canadian planters.

Marlboro—Large size, light crimson color; good quality and firm. Plant vigorous and productive. The first berries ripen quite early, but the entire crop covers a period of four or five weeks in ripening.

Ruby Red—This grand variety was originated at Marlborough, N.Y., and is a seedling of the well-known variety "Marlboro." It is a strong grower, of large, hardy canes, and a good plant maker. It ripens with the earliest, and continues picking a long season. Its fruit is large, of good flavor, bright red in color, exceedingly firm, making it a grand shipper.

Shaffer's Colossal—Colossal both in bush and berry. Carries to market well; excellent to dry and unsurpassed for canning. Berry dark crimson in color and excellent in quality; a very valuable variety. Does not sucker, but roots from tips like Black Caps.

ST. REGIS EVERBEARING

BEARS FIRST, LAST AND ALL THE TIME.

RASPBERRIES FOR FOUR MONTHS! That's what you get when you plant **St. Regis**—the new everbearing variety. Moreover they are not only raspberries, but raspberries of the very highest grade.

The variety has been aptly termed "the early till late" variety; for it is the first red raspberry to give ripe fruit, while it continues to produce berries without intermission until late in October.

St. Regis is of pure American blood and of ironclad hardihood, the canes enduring the severest cold uninjured and are wonderfully prolific. Unlike *Belle de Fontenay*, *Henrietta*, *Marvel of Four Seasons* and all other so-styled everbearing red raspberries that have preceded it, (and many others that are not everbearing), its foliage never suffers by sunburn or scald, nor is its growth of cane impaired by the heat or drought of summer.

In addition to the bright crimson color and large size of the fruit, it is so firm and rich in sugar that it will stand shipping two hundred miles arriving at market in first-class order; and it can readily be kept in perfect condition for several days after being gathered.

The merits of this truly reliable, everbearing raspberry may be summarized as follows:

1. It is the earliest of all red raspberries.
2. It is wonderfully prolific; the first, or main crop, being far greater than that of any other red variety known.
3. It gives a crop of fruit all summer and autumn, fruiting on the old canes in generous quantities until late in August. By this date, berries begin to ripen upon the young, i.e., current year's canes, which continue to produce berries in increasing numbers until late autumn; in fact, until severe frost.
4. Berries are bright crimson, of large size and of surpassing quality—rich, sugary, with full raspberry flavor. They are of exceedingly meaty, firm texture and keep in good condition longer, after being gathered, than any other red raspberry. As a shipper it is unexcelled.
5. The canes are of stocky, strong growth with a great abundance of dark green leathery leaves.
6. It succeeds upon all soils, whether light and sandy or cold heavy clay, and the canes are absolutely hardy.



St. Regis Raspberry.

BEARS THE FIRST SEASON.

St. Regis yields a crop of fruit the season it is planted. Plants of it planted in early April gave ripe berries on June 20th of the same year. For four weeks thereafter the yield was heavy and the canes continued to produce ripe fruit freely without intermission, until the middle of October. The berries were large and beautiful, firm and full flavored to the very last.

Class II.—Black Caps.

Conrath—One of the largest black raspberries grown; fully ten days earlier than Gregg; entirely hardy and not affected by severe drought; fruit perfect to the last picking; a heavy yielder. Owing to the firmness of the fruit, it proves valuable as a shipper. Quality unsurpassed.

Cumberland—A valuable acquisition among black raspberries. With its greatly superior size, it combines the equally valuable characteristics of great firmness, splendid quality and wonderful productiveness. The plants are entirely hardy, very vigorous and healthy, and seem entirely unaffected by either anthracnose or yellow blight.

Gregg—Of great size, fine quality, very productive and hardy.

Hilborn—Originated in Canada, hardy, vigorous and productive, and had hardy blossoms. The fruit is about the size of the Gregg, jet black and of the best quality. It ripens nearly a week later than Souhegan, and bears a long time. Fully sustains all claims ever made for it, and is the best second early black cap; should be in every home garden.

Plum Farmer—The largest, most productive, best colored and most attractive black cap in cultivation. The plants are models, being very vigorous, clean growers, presenting a silvery bluish appearance when not in leaf. It succeeds when most black caps fail. The fruit is not jet black, but has a grayish bloom like the Gregg. It is very early, and ripens the bulk of its crop in a short time. The fruits are enormously large, some measuring one full inch in diameter. It sells for the very highest prices in the market. The berry growers in this locality are wild over it. It has created a furore wherever grown, and excites the admiration of all when shown on the market.

SELECT CURRANTS

Ripe just before raspberries are gone, and continuing in prime order for several weeks, there is no more useful fruit than the currant, and it is among the easiest to cultivate.

Plant in rows four feet apart each way, if practicable. Light and air will do as much to enhance the value of currant bushes as with other plants. Keep the ground mellow, free from weeds, and in good state of fertility, and prune freely every spring. Should the currant worm appear, dust a little white hellebore powder from a small coarse bag over the bushes when the leaves are damp. In some instances it may be necessary to repeat this process, but the trouble and expense of exterminating the worms is trifling, if the powder is applied as soon as the worms appear.

But few realize the value of planting currants largely. Such plants as we deliver, two years old and once transplanted, give a quick return, and the market for this fruit is always open.

If you would lessen the attacks of the currant worm on the red varieties it is a good idea to plant them alternately with the black, as the worm does not trouble the black varieties.

Baldwin's Black—One of the most popular newer market varieties largely grown; most prolific and large fruit.

Black Champion—A new variety from England; has been tested for several years in this country, and proves one of the best black currants yet introduced; excellent quality and flavor; a strong grower and very productive.

Boskoop Giant—A new black currant, originated in Holland, and recommended by the Boskoop Horticultural Co. as being larger and more productive than any other black currant grown. In England, where this variety is now being extensively grown, all other black varieties are being discarded for the Boskoop Giant, and we find, for Canadian culture, that there is nothing to equal it. The fruit is of large size, of best quality, and has the great merit of ripening evenly, which makes it a most desirable commercial variety to grow, being easy to pick. It is an early and prolific producer, a vigorous grower, perfectly hardy. We shall propagate this currant largely, having such confidence in it, as we are satisfied it is a currant of great merit.

Cherry—Very large; deep red; rather acid; bunches short. Plants erect, stout, vigorous and productive.

Fay's Prolific—Originated in Chautauqua County, N.Y. A cross between Cherry and Victoria. Of large size, fine flavor, and claimed to be twice as prolific as the Cherry; red in color. Universally recommended by those who have seen or had experience with it. A great acquisition.

Lee's Prolific Black—A new English variety. The fruit is large and of superior quality; the bush is a vigorous grower and enormously productive, rendering it very profitable.



Perfection Red Currant.

Perfection—This grand new variety was originated by Chas. G. Hooker, of Rochester, N.Y., by crossing Fay's Prolific with White Grape Currant, with a view to combining the large size and color of the Fay with the good quality and productiveness of the White Grape. From quite a number of plants of this cross, the Perfection was selected as the best, and after a thorough trial by the originator, was proved superior in every respect to any other red currant, combining, as it does, the good qualities of both parents. Tested in New York State Agricultural Experimental Station, it has proved the best in 60 varieties. Since then it has been three times winner of gold medals, winning the \$50.00 gold Barry Medal of the Western New York Horticultural Society in 1901, also at the Pan-American Exposition at Buffalo the same year, received a gold medal, the highest award given new fruit at that exhibition, and in 1904 was awarded a gold medal at St. Louis.

We have thoroughly tested the Perfection, and in offering it for the first time in Canada recommend it first in quality, productiveness

and for the remarkable size of the fruit clusters, which are very long. A very important fact is that it has a long stem from fruit to attachment to branch, making it easy to pick.

Prince Albert—Berry large, immense bearer as a late red currant. Its heavy cropping qualities and late bearing make it very valuable.

Victoria Red—A splendid variety, ripening two or three weeks later than the others, and continuing in fine condition for a long period. Bunches extremely long; berries of medium size; brilliant red and of the highest quality.

Victoria, Black—A new Black Currant of superior merit, vigorous habit and unequalled productiveness. Fruit of enormous size and fine flavor, a rapid and vigorous grower. If you want the latest variety of Black Currant, order the New Victoria.

White Grape—Very large; yellowish white; sweet, or very mild acid; excellent quality and valuable for the table. Very distinct from White Dutch, having a low, spreading habit, and dark green foliage. Very productive.

GOOSEBERRIES

This fruit is so useful for cooking, when green or ripe, and it may be canned with such facility, that it is beginning to be cultivated very extensively for both home use and market.

It requires the same cultivation and treatment for worms as the currant. The American varieties, though not quite so large as the English, are of fine quality, and, unlike the latter, are not subject to mildew.

Downing—Large size, oval, greenish white; plant very vigorous and hardy, with stiff, strong shoots; foliage heavy, covering the fruit from the sun, and resisting mildew; bears most abundantly, and is profitable for market and home use. The best of all the American varieties.



Downing Gooseberry.

Houghton's Seedling—A vigorous American sort; very productive, free from mildew; fruit medium, roundish, smooth, of a pale red color, tender, sweet and of delicious flavor.

Pearl—A new Canadian white gooseberry of much promise. Entirely free from mildew under most trying circumstances. Mr. Thomas Hague, of Smith's Falls, an old English gardener, says: "The Pearl is my favorite. It is a splendid kind, hard to beat, taking it all through. Some of the bushes that had only been planted one year I picked three quarts from this season. It has not shown any signs of mildew, and such a robust growth I never saw in the Old Country. Some of the new wood is over two feet long and nearly half an inch thick." F. Cranfield, Assistant Horticulturist of the Wisconsin Experiment Station, writes July 13th, 1896: "In reply to your enquiry regarding the Pearl Gooseberry, will say that all other varieties, except the Pearl, in our plantation are affected with mildew. Three plants out of six survived the severe drought of last summer, and are now growing vigorously."

Red Jacket—Claimed to be the best red gooseberry in existence, with the best foliage; mildew proof, fruit of the best and splendid cropper, as large as the largest; berry smooth, very prolific and hardy; quality the best; exceptionally clean, healthy foliage, free from mildew, and will succeed under circumstances where the common sorts fail.

ENGLISH VARIETIES.

There are very few of these that succeed here on account of their liability to mildew. The following varieties are believed to be exempt from this drawback, and we therefore offer them, believing that they will meet every requirement.

Industry—Large, oval; dark red, hairy; rich and agreeable. Although this is a foreign variety, it has succeeded admirably on our grounds, where it has fruited extensively for several years. We can confidently recommend it, both for the garden of the amateur and the market plantation. The plant is remarkably vigorous and productive, and the fruit large, beautiful and of excellent quality. Where shoots are left long, they fruit to the very tips.

Keepsake—A new variety of English Gooseberry, very large, straw color, and of excellent flavor. Foliage very heavy, which protects the fruit. The Keepsake ranks among the earliest Gooseberries, being fit for picking green this year as early as April 30th. It is a splendid sort for shipping long distances.

Victoria—The best Gooseberry in England and the best Gooseberry for Canada. Its strong points are, that it blossoms late and avoids early frosts, yet it ripens earlier than Industry and is free from mildew. A vigorous and strong grower, very hardy, producing large fruit of pale red color of highest quality; a heavy cropper and is, in fact, unequalled among English varieties. The Victoria is nearer the perfect berry than any other variety offered for sale to-day.

Whitesmith—Large, roundish oval; yellowish white, slightly downy; of first quality.

BLACKBERRIES

This excellent and profitable fruit should be planted for garden use in rows of six feet apart, with plants four feet apart in the rows; for market, in rows eight feet apart, with plants three feet apart in the rows. Give the plants the same cultivation as raspberries.

Agawam—A mid-season variety, and has a flavor similar and equal to the wild berry. Perfectly hardy.



Blowers—What we are going to tell you about this great berry is not from hearsay, but entirely from observation and facts. The berry is undoubtedly of seedling origin. It was discovered growing under a cherry tree at the edge of a piece of woods in Chautauqua Co., N.Y. Mr. Blowers, of Westfield, whose attention was called to this plant, at once saw great possibilities in its propagation, and succeeded after a time in securing enough root cutting to plant one-third of an acre.

What Mr. Blowers Says.

"The first planting consisted of one-third of an acre. The second year this planting produced 2,720 quarts, from which I realized about \$270, the whole crop being sold locally on an average of about 10c. per box. I have all the old varieties, but none of them can compare in vigor, bearing, size or quality with the Blowers; it has proved harder than all others and is the only blackberry that can be classed as perfection. Its growth is phenomenal, some of the canes measuring 14 ft., and on account of which it will produce each season twice as much

Blowers Blackberry.

bearing wood as any other variety, this feature being responsible for its immense yield. The berries are extremely large, being on an average of one inch, many measuring $1\frac{1}{4}$ to $1\frac{1}{2}$ inches long, and on that account I have never paid more than 1c. per box for picking. It has sold this season for two and three cents more per box than other varieties, and the demand is always in excess of supply."

What We Saw.

A visit to Mr. Blowers' plantation, August 10th, 1906, revealed a sight not soon to be forgotten. We could see little but berries. Notwithstanding the fact that the picking had been going on for twenty days, it seemed that very little impression had been made. We saw thousands of large, luscious, ripe berries, and what was more remarkable, berries in all stages of growth—black, turning red, green, and more remarkable still, blossoms. When Mr. Blowers informed us that he would be picking for another month, and in addition would exhibit a few crates, together with bearing bushes, at the Chautauqua Co. fair in September, it took our breath away, and we began to realize the possibilities of a blackberry with unheard of fruiting qualities.

The Quality.

The fruit is exceedingly sweet and pleasant, with no perceptible core when fully developed. It has made a record for a first-class shipper, standing up well for several days.

Eldorado—Fruit medium to large, oblong, conical, irregular, with very large drupes, small seed and core. Quality excellent. Its merits are good size, extra fine quality, extreme hardiness and great productiveness.

Eric (Uncle Tom)—Plant a vigorous grower, berry large, round, and of a high quality. Season early.

Gainor—Originated a few miles from our nurseries, being a chance seedling. Our attention was first called to it by its extreme hardiness. While other blackberries near it were either killed or damaged by extreme winter, the Gainor was unharmed, and the following season would bear a large crop of large handsome, fine-flavored fruit. A deep black, and in quality good, tender, and sweet. Its large size, fine quality and extreme hardiness make it a valuable blackberry.

Mersereau—The cardinal points in its favor are: Great size, luscious flavor, great hardiness of cane and great productiveness. This new Blackberry originated in North-western New York, where the mercury falls from 15 to 25 degrees below zero, and where "Mersereau" has stood in open field culture without the slightest protection, and has never been injured. The berries are sparkling black throughout, and what adds great value to it as a market berry—it remains black after it is gathered. In quality it is so exceptionally sweet, rich, melting and luscious, being without core, and the seedy character of most other iron-clads also being absent, that a shortcake made of it after the manner of strawberry shortcake, is even more delicious than any made from strawberries. It is unsurpassed as a shipper and keeper, being firm, and does not bleed in handling. The canes are exceedingly strong, upright in habit, and upon fairly good soil attain a height of eight feet if permitted to grow unchecked. The foliage is large, abundant and entirely free from rust or blight. Its yield is enormous, affording heavy pickings from the first until the crop is all matured. Its season is early to midsummer.

One thousand dollars per acre per annum is the record of the Mersereau, for it has yielded twelve thousand quarts of berries per acre, which sold at an average of ten cents per quart. Allowing two hundred dollars for picking and marketing, the returns were one thousand dollars per acre.

Wachusett Thornless—Fruit of medium size, oblong, oval, moderately firm, sweet and good, and less acid than any blackberry we have seen. It is a good keeper, ships well, and is therefore valuable as a market berry. The plant is said to do equally well on light and heavy soils, and to bear heavy crops where other varieties have failed. It is also very hardy and free from thorns.

Ward—Undoubtedly a seedling of the Kittatinny, which it resembles, having all of its qualities and none of its defects. A healthy, strong grower with sturdy canes producing fine large fruit, black throughout, without core, and of excellent quality. Has never suffered from winter injury in New Jersey. An exceedingly prolific sort, the bushes being covered with its fine fruit, producing as many bushels per acre as the Wilson in its prime.

DEWBERRY OR RUNNING BLACKBERRY

Lucretii—The plants are perfectly hardy and healthy, and remarkably productive. The fruit, which ripens with the Mammoth Cluster Raspberry, is often one and a half inches long by one inch in diameter; soft, sweet and luscious throughout, without any hard centre or core. As the dewberry roots only from the tips, and does not sprout like blackberries, this will be much more desirable for garden culture, and the trailing habit of the plant will render winter protection easily accomplished in cold climates where that precaution may be necessary.

IMPROVED DWARF JUNE BERRY

The Juneberry is one of the most valuable berries. The wood is hard and firm, and endures the extremes of the climate without injury. Its leaves are a dark, glossy green. The plant propagates from suckers. The flowers appear about the same time as those of the apple. The fruit is borne in clusters like the currant, and ripens in June. Its size equals the wild gooseberry; shape, round; color, reddish purple at first, and becomes a bluish black when fully ripened. Its flavor approaches the huckleberry, a mild, very rich sub-acid. Perfectly hardy, not being injured by wet, cold or dry weather, and needs no special treatment.

MULBERRIES

The Mulberry furnishes the two-fold purpose of ornamental and fruit tree. It is easily cultivated, and requires little or no pruning. It does best planted in a deep, sandy loam.

Downing's Everbearing (B)—Produced from the seed of the Multicaulis. Tree very vigorous and productive, continuing in bearing a long time; fruit $1\frac{1}{4}$ inches long, and $\frac{3}{8}$ of an inch in diameter; color blue black; flesh juicy, rich, sugary, with a sprightly, vinous flavor.

New American (B)—A new variety, forming a beautiful tree; very hardy and productive. Undoubtedly the best of all the mulberries. Tree a strong grower, with beautiful large leaves and spreading branches; perfectly hardy; bearing annually large crops of delicious berries $1\frac{1}{2}$ inches long, and $\frac{3}{8}$ inch in diameter; jet black in color.

Russian (B)—A very hardy, rapid growing timber tree of great value, introduced from Russia by the Mennonites; foliage abundant, and said to be very desirable in the culture of silk worms.

ASPARAGUS

The earliest and finest of spring vegetables is among the easiest cultivated and most profitable. A bed once planted suffers no deterioration for thirty years or more, if it is properly attended to and well manured.

Cultivation.

Select best possible piece of land, then trench to a depth of about eighteen inches, digging in a quantity of half rotted manure. Put in the plants, twelve inches apart in the rows, and two feet between the rows; planting them about six inches deep. After cutting down the plants in the fall give a good top dressing of well rotted manure, which should be forked in in the spring. As

soon as the plants begin to show growth in the spring, give a top dressing of nitrate of soda—say 10 lbs. to 100 square feet of space. Repeat this when through cutting for the season.

Barr's Mammoth—This variety has commanded 35 cents per bunch when other asparagus was selling for 10 and 15 cents. Stalks very large, frequently an inch in diameter, with few scales. Very tender and succulent.

Columbian White—A choice new variety, producing immense white shoots, which stay white as long as it is fit for use. One of the handsomest and best asparagus in existence. Considered one of the best for canning.

Conover's Colossal—This variety is superior in size and quality, being remarkably tender and fine flavored.

Ideal—Nothing approaching this magnificent asparagus has ever been introduced upon the American continent. Until we had thoroughly tested it we could not believe its high qualities. The finest flavor, largest size, and most productive, are its qualifications. A bunch of 20 stalks weighed two pounds, and was cooked and served to four people. There was no waste, the whole stalk eatable and no woody fibre. Quality ahead of anything in the asparagus line grown. We cut fine, eatable asparagus second year from seed. This year is fourth year from seed and a thorough test. Plants averaged as good from whole bed as shown in cut. This bunch on being shown to a leading fruit and greengrocer in Toronto, created great admiration. Such bunches, he says, would retail at \$1.50 each, the beginning of the season. The asparagus shown was cut first of July, which shows the productive qualities of the "Ideal," as the bed has been cut regularly from the first of the season. This is a grand introduction.

Palmetto—A very early variety, ready for market in advance of Conover's Colossal. A heavy yielder, and very even and regular in its growth. Average bunches contain fifteen shoots, measure thirteen inches in circumference, and weigh about two pounds. Very hardy and suitable for either the North or South.



A Bunch of Ideal Asparagus, 20 Stalks, Weight 2 Pounds.

RHUBARB OR PIE PLANT

This deserves to be ranked among the best early products of the garden. It affords the earliest material for fine pies and fresh table sauce, continues long in use, and is valuable for canning. Make the ground rich and deep, as recommended for asparagus. Plant four feet apart each way.

Myatt's Linnaeus—Those who have never grown this variety, which is of superior quality, will hardly recognize the old "Pie Plant." It is an early, tender variety, without being in the least tough or stringy, with a mild, sub-acid flavor.

Paragon—This is a great improvement on old varieties in every respect, larger stocks and stronger grower, not as acid as other varieties, requiring less sugar; flavor superior.

Victoria—This variety is medium in size, is also an early sort and very tender.

NUT-BEARING TREES

Almond, Soft or Papershell (B)—This is more desirable than the Hardshell, wherever it will succeed, but is not quite so hardy. Kernel large, sweet and rich.

Butternut, or White Walnut (A)—A fine native tree, producing a large, longish nut, which is prized for its sweet, oily, nutritious kernel.

Chestnut, American Sweet (A)—A valuable native tree, both useful and ornamental; timber is very durable and possesses a fine grain for oil finish. Nuts sweet, of delicate flavor, and are a valuable article of commerce. No farm should be without its grove of nut-bearing trees, and the chestnut should be foremost wherever the soil is adapted to its growth.

Filbert, American (D)—Somewhat smaller than the English variety. Shell very thick; nut of good flavor; hardy.

Filbert, English (D)—This is one of the easiest culture, growing 6 to 8 feet high, entirely hardy, and one of the most profitable and satisfactory nuts to grow, succeeding on almost all soils, bearing early and abundantly, nut nearly round, rich, and of excellent flavor, admired by all for the dessert.

Hickory, Shell Bark (A)—To our taste, no other nut that grows, either foreign or native, is superior to this; in quality it possesses a peculiar, rich, nutty flavor, excelled by none. The tree is of sturdy, lofty growth. The wood, on account of its great strength and elasticity, is highly prized for making agricultural implements, and it is unsurpassed for fuel.

Walnut, Black (A)—This is one of the most valuable of all our timber trees for planting; a rapid grower, producing a large nut. The timber enters more largely into the manufacture of furniture and cabinetware than almost any other, and is prized almost with mahogany.

Walnut, English, or Madeira Nut (A)—A fine, lofty growing tree, with a handsome spreading head. It is scarcely hardy enough here, but further south it is a profitable tree to plant, as it produces large crops of excellent nuts. The fruit in a green state is very highly esteemed for pickling, and large quantities of ripe nuts that are annually imported and sold here prove the estimation in which they are held for the table.

Walnut, Japan—Of the finer imported walnuts this is the species best adapted by its hardy, vigorous habit for general culture in our country. It grows with great vigor, assuming a handsome shape without pruning, and has withstood a temperature of 21 degrees below zero without injury. Its nuts are considerably larger than the common hickory-nut, and borne in clusters of fifteen to twenty. The shell is a little thicker than that of the English walnut, which it resembles in a general way; the kernels are meaty, delicate, and can be removed entire. The trees begin to bear when two or three years old.

Ornamental Department



Boulevard of our Elms at Walkerville, Ont.

While most people appreciate well arranged and well kept grounds, large or small, many fail to realize that **they** can have equally fine grounds. They have tried a few shrubs or roses, perhaps, growing in thick turf, with no attention given to pruning or cultivating. Under such circumstances good results cannot be expected.

Aside from the pleasure of having the trees, shrubs, vines and flowers in the grounds surrounding a home, few realize how much these add to the commercial value of a place. A purchaser having to decide between a house with bare, unkept grounds, and one surrounded by fine ornamentals, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what would otherwise take some years to secure. Sagacious men are led by a knowledge of these facts to plant fine trees and shrubs about vacant lots they are intending to put upon the market. Lots thus planted readily secure purchasers at good prices, when bare grounds go begging for buyers.

HOW TO PLANT.

Flower gardens and gravelled walks are beautiful and expensive, and require constant labor to keep them in order. Grass and trees are always charming, and need but little care. In the laying out and planting of grounds, have regard to economy of labor; but let there be as few walks as possible; cut your flower beds (not many) in the turf, and don't make the lawn a checkerboard of trees and shrubs. Mass them in boundary lines or in groups, leaving a broad expanse of green for the eye to rest on, and the mower to sweep freely over. If an unpleasant object is in sight, conceal it by planting free-growing trees; if there is a pretty view, leave an opening. While it is not well to have large

trees near the house, there should be at least one by the sunny corner for summer shade. Plant flowering shrubs and the smaller evergreens in circles or ovals, and twice as thick or close as they should stand when fully grown. This will make a show at once, and in two years or more you can take out one-half, leaving the rest to fill out the space, and obtaining a supply of finely-rooted plants to put somewhere else. Where the ground is wholly given up to trees and shrubs, the ground should be deeply and thoroughly prepared for planting. Keep the shrubs and trees cultivated or mulched the first two seasons. Mow the grass frequently, and top dress with fine manure every fall and winter.

Straggling growers, like the *Forsythia* and *Pyrus Japonica*, may be repeatedly pinched back or clipped during the growing season, to produce a close, compact form. *Weigelas* and *Deutzias* should be pruned back each year to the old wood. A very beautiful hedge can be made by intermingling different Flowering Shrubs, and clipping, or allowing them to grow naturally.

PRUNING.

Pruning, as practiced by some people, has the effect to render trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly conifers, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into regular shape we destroy their identity. The pruning knife, therefore, should be used to assist nature, and handled with judgment and care; to lop off straggling branches, to thin the head of a tree which has become too dense, and to remove dead wood. Sometimes it becomes necessary to prune severely to keep a tree from attaining too great size.

Shearing may be practiced on hedges, but never on trees or shrubs.

In order that purchasers may be able to form some idea of the height which ornamentals attain at maturity, we have arranged the following key:—

A indicates trees which will attain the largest size, 50 feet and upwards.

B indicates trees which will attain the secondary size, 20 to 40 feet and upwards.

C indicates trees which will attain the medium size, 9 to 15 feet and upwards.

D indicates trees which will attain the smaller size, 1 to 8 feet and upwards.

C indicates in Shrubs, those which will attain a size 9 to 12 feet.

D indicates, in Shrubs, those which will attain a size 5 to 8 feet.

E indicates, in Shrubs, those which will attain a size 1 to 4 feet.

Upright Deciduous Trees

AILANTHUS (Tree of Heaven).

Glandulosa (A)—From Japan. A lofty, rapid-growing tree, with long, elegant feathery foliage, exempt from all diseases and insects. One of the most distinct of ornamental trees with pinnate foliage. Useful to produce tropical effects.

ALDER (*Alnus*).

Imperial Cut-Leaf (*Laciniata Imperialis*) (B)—A charming tree of stately, graceful growth, having large and deeply-cut foliage. Vigorous and hardy, one of the best lawn trees.

ASH (*Fraxinus*).

American White Ash (*Americana*) (B)—A well-known native tree.

European (*Excelsior*) (B)—A lofty tree, of rapid growth, with spreading head; pinnate leaves and black buds.

ALMOND (*Amygdalus*).

Large Double-Flowered Almond (*Communis Flore Roseo Pleno*) (C)—A vigorous, beautiful tree, covered in May with double rose-colored blossoms, like small roses.

White-Flowered Almond (*Davidiana Alba*) (C)—Flowers single white, and appear before the leaves; very showy. The first tree to flower in the spring, and hence particularly desirable on that account.

BEECH (*Fagus*).

European (*Sylvatica*) (A)—A beautiful tree, growing to the height of 60 or 80 feet.

Fern-Leaved (*Heterophylla*) (C)—An elegant tree of symmetrical habit, having beautifully cut foliage.



Beech, Purple Leaf.

Purple-Leaved (*Purpurea*) (B)

—Discovered in a German forest. An elegant, vigorous tree, growing 40 to 50 feet high. Foliage deep purple, changing to crimson. Like all varieties of the beech, this is difficult to transplant; hence small trees three feet high are preferable.

Rivers' Smooth-Leaved Purple Beech (*Purpurea Riversii*) (B)—This variety, which we

procured of Mr. Rivers, differs from the ordinary Purple-leaved Beech by its compact, symmetrical habit of growth, and crimson foliage early in the spring, changing to dark purple in summer. The finest of all purple-leaved trees.

BIRCH (*Betula*).

Paper or Canoe Birch (*Papyracea*) (A)—Native of America; forms a large tree; bark brilliant white, leaves large and handsome.

Purple-Leaved Birch (*Atropurpurea*) (B)—A variety possessing the vigorous habit of the Birches, and having purple foliage.

White Birch (B)—A distinct American species, of vigorous, rapid growth, with triangular taper-pointed leaves—smooth

and glossy. Grows to twenty and thirty feet.

CATALPA.

Chinese Catalpa (*Bungei*) (D)—A species from China, of dwarf habit, growing only from three to five feet high. Foliage large and glossy; a shy bloomer. Top-grafted on tall stems it makes an effective umbrella-shaped tree.

Japan Catalpa (*Kämpferi*) (B)—Introduced from Japan by Siebold. A species of rapid growth, with deep green, glossy foliage. Flowers, fragrant, cream-colored, speckled with purple and yellow; not so large as those of *syringæfolia*; panicle also is much smaller and two weeks later than *syringæfolia*.

Speciosa (A)—A variety originating in the West; more upright and symmetrical in its growth than the common Catalpa (*Syringæfolia*), and blossoms two or three weeks earlier. Very valuable for timber, fence posts, railroad ties, etc., possessing wonderful durability. A very ornamental and valuable tree.

CHERRY (*Cerasus*).

Large Double-Flowering Cherry (Flore Alba Pleno) (B)—At the period of flowering a remarkably beautiful and attractive tree. The flowers are so numerous as to conceal the branches, and present to the eye nothing but a mass of bloom, each flower resembling a miniature white rose. A valuable variety, deserving of wide dissemination. May.

CRAB (*Pyrus*).

Bechtel's Double-Flowering Crab (C)—As an ornamental tree of medium size it has few equals. Its disposition to bloom when very young is remarkable. At our nurseries may be seen specimens of Bechtel's double-flowering crab, not over two and a half feet high, literally covered with bloom, which present the appearance of a mass of medium-sized roses of blush color. The bloom is fragrant, much resembling the odor of tea roses. This should be in every choice collection.

DOGWOOD (*Cornus*).

White-Flowering Dogwood (Florida) (B)—An American species of fine form, growing from 16 to 25 feet high. The flowers produced in spring, before the leaves appear, are from three to three and a



Bechtel's Double Flowering Crab.

half inches in diameter, white, and very showy. They begin to appear just as the Magnolia flowers are fading, and are invaluable for maintaining a succession of bloom in the garden border on the lawn. They are also very durable, lasting, in favorable weather, more than two weeks.

ELM (*Ulmus*).

American White (Americana) (B)—The noble, spreading, drooping tree of our own woods. One of the grandest and hardiest of park or street trees.

American Cork Elm (Racemosa) (B)—Young wood very corky; foliage light green. A distinct variety.

English (Campestris) (B)—An erect, lofty tree, with rather small leaves.

Huntingdon (B)—Of very erect habit and a rapid vigorous grower. Bark clean and smooth. One of the most desirable for general purposes. Grows to a height of 40 feet.



American Elm.

Purple Filbert-Leaved Elm (*Corylifolia Purpurea*) (B)—A fine purple-leaved variety.

Scotch or Wych (*Montana*) (B)—A fine, spreading tree, of rapid growth; foliage large.

HONEY LOCUST (*Gleditschia*).

Three-Thorned Gleditschia or Honey Locust (*Triacanthos*) (B)—A rapid-growing native tree, with powerful spines and delicate foliage. Used for hedges. See Hedge plants.

HORSE CHESTNUTS (*Aesculus*).

Double White Flowering (A)—A superb variety, with double flowers, in larger panicles than the common sort, and of fine pyramidal habit. The absence of fruit by which much litter is avoided, is an important argument in favor of its employment. It is one of the best ornamental trees.

Red Flowering (*Rubicunda*) (B)—Not so rapid a grower as the white; foliage of a deep green, and blooms later. A very showy tree.

White Flowering (*Hippocastanum*) (A)—A very beautiful, well-known tree, with round, dense head, dark green foliage, and an abundance of showy flowers in early spring.

JUDAS TREE, OR RED BUD (*Cercis*).

American (*Canadensis*) (B)—A small-growing tree, covered with delicate pink flowers before the leaves appear.

LABURNUM.

Common Laburnum or Golden Chain (B)—A native of Europe, with smooth and shining foliage, and attaining a height of twenty feet. The name "Golden Chain" alludes to the length of the drooping racemes of yellow flowers which appear in June.

LARCH (*Larix*).

European (*Europæa*) (A)—An excellent rapid-growing pyramidal tree; also valuable for timber. Small branches, drooping with needle-shaped foliage, like the spruce or hemlock.

LINDEN, or LIME (*Tilia*).

American (*Americana* or *Basswood*) (B)—A rapid-growing, beautiful native tree, with very large leaves and fragrant flowers.

Broad-Leaved European Linden (*Platiphylla*) (B)—A tree of about the same size as *T. Europæa*, but readily distinguished from it by its larger and rougher leaves. This is the variety usually sold for European, as the growth is more regular than the smaller-leaved.

European (*Europæa*) (B)—A very fine pyramidal tree, with large leaves and fragrant flowers. Only desirable on large grounds.

Red-Twigged (B)—A fine species; medium in size and branches a blood red.

White, or Silver-Leaved (*Argentea*) (B)—A handsome, vigorous growing tree; large leaves, whitish on the under side, and have a beautiful appearance when ruffled by the wind. One of the best.

LOCUST, or ACACIA.

Black or Yellow Locust (B)—A native tree, rapid grower, and very valuable for timber; is also quite ornamental. The flowers are disposed in long, pendulous racemes, white or yellow, very fragrant, and appear in June.

MAGNOLIA.

One of the most beautiful species of flowering trees. Being difficult to transplant, small trees, three to four feet high, are preferable.

Alexandria—New, specially desirable on account of its handsome large flowers of white and red.

Cucumber Tree (*Acuminati*) (A)—A beautiful pyramidal growing, native species, growing to the height of sixty or seventy feet, with large glossy leaves; flowers yellow, tinted with bluish purple.

Lenne's Magnolia (*Lennei*) (C)—Recently introduced; foliage large, flowers purplish crimson or magenta, and although not a handsome grower, a superb variety.

Norbert's Magnolia (*Norbertiana*) (C)—Tree a fine, regular grower, foliage fine, flowers, very large, white and purple. One of the best.

Showy Flowering Magnolia (*Speciosa*) (C)—A good grower; tree generally round-headed, and of fine form; flowers a little smaller and of lighter color than those of *Soulangeana*, but being produced in wonderful profusion. This is one of the best varieties.

Soulange's Magnolia (*Soulangeana*) (C)—A French hybrid, a rather irregular grower, foliage large, glossy and massive, flowers very large, three to five inches in diameter, white and purple, very effective.

Umbrella Tree (*Tripetela*) (B)—A hardy, medium sized tree, with immense leaves, and large, white flowers, 4 to 6 inches in diameter, appearing in June.

MAPLE (*Acer*).

European Sycamore Maple (*Pseudo Platanus*) (B)—From Europe. A handsome tree, of rapid, upright growth, with large foliage and smooth, ash-gray colored bark.

Ginnale (*Ginnalian Maple*)—This is said to be a variety of the Tartarian Maple, and a native of Amurland, which has been extensively grown, both at Brandon and Indian Head since 1891, and found to be thoroughly hardy. It is more shrubby in habit than the Tartarian Maple, seldom attaining a height of over 10 or 12 feet. The leaves are small and prettily cut or lobed. The wings of the seeds are early margined with bright red, and in the autumn the leaves assume brilliant hues of red and scarlet. This is undoubtedly one of the hardiest and most beautiful of shrubs, and is well adapted for general cultivation throughout the North-West country.

Manitoba or Ash-Leaved (*Negundo Fraxinifolium*) (A)—A fine, rapid-growing variety, with handsome light green pinnated foliage and spreading head. Very hardy.

Norway (*Platinoides*) (A)—A native of Europe. Its large, compact habit, broad, deep, green, shining foliage, and its vigorous growth, render it one of the most desirable species for streets, parks and lawns.

Purple-Leaved Sycamore (*Purpurea*) (B)—A strong, rapid grower; foliage deep green on the upper surface and purplish red underneath. Produces a fine effect with other trees.

Red or Scarlet Maple, Red Bud (*Rubrum*) (B)—A native species of medium size and rounded head; produces deep red blossoms, which appear before the leaves. In autumn the foliage changes to brilliant scarlet, rendering the tree very conspicuous. In the South the seed-pods assume gorgeous tints.

Reltenbach's Norway (*Reltenbachii*) (B)—An excellent and striking variety of pyramidal habit; foliage beautiful green in early spring, changing to decided purple towards midsummer, purplish scarlet in autumn,

Schwedler's Norway (Schwedlerii)

(B)—A beautiful variety, with the young shoots and leaves of a bright purplish and crimson color, which changes to purplish-green in the older leaves. One of the most valuable trees of recent introduction.



Maple, Schwedlerii.

uable both for the production of sugar and as an ornament in lining streets and avenues. A stately form and fine rich foliage renders it justly popular as a shade tree.



White or Silver-Leaved Maple.

Silver-Leaved (Dasycarpum) (A)—

One of the most ornamental of the species; the under surface of the leaves a soft white. It is exceedingly rapid in its growth, often making shoots six feet long in a season; valuable as a street tree.

Sugar, or Rock (Saccharinum) (A)—

The well-known native variety, valuable both for the production of sugar and as an ornament in lining streets

Wier's Cut-Leaved (Wierii Lacinatum) (A)—A silver maple with remarkable and beautiful dissected foliage. Of rapid growth; shoots slender and drooping, giving it a very graceful appearance. Should be in every collection. While it makes a large tree, if undisturbed, it will bear any amount of pruning, and may be easily adapted to small lawns.

MAPLE JAPAN.

Cut-Leaved Purple Japan Maple (Dissectum Atropurpureum) (D)—One of the most striking and handsome varieties of Japanese Maples. Form dwarf and weeping. The leaves are of a beautiful rose color when young, and change to a deep and constant purple as they become older. They are also deeply and delicately cut, giving them an elegant, fern-like appearance. The young growth is long, slender, and pendulous, and, like the leaves, has a deep crimson hue. Besides being an elegant and attractive lawn tree, it is also very useful for conservatory decoration in spring.

Dark Purple-Leaved Japan Maple (*Atropurpureum*) (D)—Forms a bushy shrub; foliage dark purple and deeply cut; very ornamental. Two to three feet plants.

MOUNTAIN ASH (*Sorbus*).



European Mountain Ash.

rapid growth, foliage purplish red in fall.

European (*Aucuparia*) (B)—A fine hardy tree; head dense and regular. Covered from July to winter with large clusters of bright scarlet berries.

Oak-Leaved (*Quercifolia*) (B)—A hardy tree, of fine habit; height and breadth from twenty to thirty feet; foliage simple and deeply lobed. A very fine lawn tree.

MULBERRY (*Morus*).

For description of several varieties, see page 52.

OAK (*Quercus*).

English Oak (B)—The Royal Oak of England, a well-known tree of spreading, slow growth.

Golden Oak (*Concordia*) (B)—A superb variety, with orange yellow leaves, which retain their golden tint throughout the season; one of the finest golden-leaved trees.

Pin Oak (*Palustris*) (B)—Foliage deep green, finely divided, assumes a drooping form when it acquires age. One of the most valuable. A good grower. Fine for streets.

Red Oak (*Rubra*) (A)—An American species, of large size and

PAULOWNIA.

Imperialis (C)—A magnificent tropical-looking tree from Japan, of extremely rapid growth, and surpassing all others in size of its leaves, which are twelve to fourteen inches in diameter. Blossoms trumpet-shaped, formed in large, upright panicles, and appear in May. Quite hardy here, but the flower buds are killed during severe winters.

PLANE TREE (*Platanus*).

American Plane, Sycamore or Buttonwood (*Occidentalis*) (A)—A well-known tree. Leaves heart-shaped at base, the short lobes sharp-pointed.

Oriental Plane (*Orientalis*) (A)—Similar to the above, but leaves more deeply cut. Extensively used for street and park planting.

POPLAR (*Populus*).

Carolina (B)—Pyramidal in form and robust in growth. Leaves large, serrated and pale to deep green in color. Will grow under street pavements and near salt water, where other trees die. Sewer gas does not seem to affect it.

Cottonwood or Canadian Poplar (*Canadensis*) (A)—A tall native tree, growing 80 feet high, with broadly deltoid, glabrous shining serrate leaves.

Cut-Leaved Silver (Bolleana) (B)—A beautiful, symmetrical growing variety, with finely-cut, silvery-white foliage.

Lombardy (Fastigiata) (A)—Well known for its erect, rapid growth and commanding form; very desirable in large grounds or along roads to break the average height and forms of other trees.

Russian—A very hardy variety with glossy foliage. Imported by us direct from Russia, and especially adapted for the colder section of the North-West.

Silver-Leaved (Alba) (B)—A tree of wonderfully rapid growth and spreading habit; leaves large, dark rich green above and white as snow beneath.

Volga Poplar (Best, hardiest of all Poplars for Western planting).

The history of this wonderful Poplar is most interesting. Some 60 years ago a colony of Mennonites from the Volga region in Russia settled in Minnesota, bringing with them cuttings of their choice plants. Many years afterwards Horticulturists were struck with the wonderful appearance of these trees, which had by that time attained a large size. The foliage is extremely beautiful. In the summer they are clothed with leaves of a beautiful glossy tint, which in late autumn turn to golden glow and attract more attention and exclamations of delight than any avenue of Maples.

The Volga Poplar is considered superior to the Carolina Poplar in habit of growth and beauty of foliage, and has proved itself entirely hardy for the West. As a timber tree it attains large size, making it specially valuable for fuel, fence posts, railroad ties, and lumber. It is valuable as an ornamental shade tree for wind-breaks and shelter-belts, and for reforestation purposes.

SALISBUREA.

Maiden-Hair or Ginkgo Tree (Adiantifolia) (A)—One of the most beautiful of lawn trees. A native of Japan; of medium size, rapid grower, and rich, glossy, fern-like foliage. Rare and elegant.

THORN (Crataegus).

Common Hawthorn (Oxyacantha) (C)—The celebrated English hedge plant. Flowers single white.

Double White (Alba Flore Pleno) (C)—Has small, double white flowers.

Paul's Double Scarlet (Coccinea fl. pl. Paulii) (C)—Flowers large, deep carmine scarlet. Superior to any other variety.

TULIP TREE (Liriodendron).

Tulipifera (A)—A magnificent native tree, with broad, glossy, fiddle-shaped leaves and beautiful tulip-like flowers; allied to the Magnolias, and, like them, difficult to transplant unless of small size.

TREE OF HEAVEN.

(See Ailanthus).

WILLOW (Salix)

Golden (Vitellina Aurantiaca) (B)—A very attractive tree at all seasons of the year, but particularly so in winter, on account of its yellow bark.

Laurel-Leaved (Laurifolia) (B)—A fine tree, with large, shiny leaves; valuable for seashore planting.



Bay or Laurel-Leaved Willow.

Vitellina Variety from Russia (B)—Bark bright golden; very conspicuous in winter. A better grower than *Vitellina Aurantiaca*.

YELLOW WOOD.

Virgilea Lutea (B)—One of the finest American trees, resembling the *Robinias*, with long racemes of white, sweet-scented flowers in June.

Weeping Deciduous Trees

BEECH (*Fagus*).

Weeping (*Pendula*) (A)—A native of Belgium; a fine vigorous and beautiful tree, attaining a large size; though ungainly in appearance when divested of its leaves, it is extremely graceful and effective when covered with its rich, luxuriant foliage.

BIRCH (*Betula*).

Cut-Leaved Weeping (*Pendula Laciniata*) (A)—Extremely vigorous and hardy. Mr. Scott, in his "Suburban Home Grounds," says of it; "No engraving can do it justice; like the palm trees of the tropics, it must be seen in motion, swaying in the lightest breeze, its leaves trembling in the heated summer air, its white bark glistening through the bright foliage and sparkling in the sun, to enable us to form a true impression of its character."

Young's Weeping (*Pendula Youngii*) (C)—Originated near Milford, England, where it was found trailing upon the ground. Grafted into stems of some height, it forms pendulous heads, drooping to the ground in fine, threadlike shoots; very beautiful.

ELM (*Ulmus*).

Camperdown Weeping (C)—A vigorous grower, and forms one of the most picturesque drooping trees. Leaves large, dark green and glossy, and cover the tree with a luxuriant mass of verdure; very desirable.



Birch, Cut-Leaved Weeping.

MOUNTAIN ASH (Sorbus).

Weeping Mountain Ash.

slightest breath of wind. All who see it agree that in light, airy gracefulness and delicacy of form and motion, it is without a rival. It has handsome foliage of a beautiful glossy green. Being a true Russian, it possesses the wonderful vigor and health for which that species is noted. It is perfectly hardy, enduring unharmed not only the severe cold of the north, but the far more destructive heat and drought of the south. It is one of the safest and most successful trees to transplant, enduring exposure and hard treatment that would kill almost any other tree. Admirably adapted for cemetery planting.

WILLOW (Salix).

Golden-Barked Babylonian Willow (Ramulis Aureis) (C)—A novel and distinct variety of the well-known Babylonian Willow, with bright golden bark in winter. Habit same as the type.

Wisconsin Weeping (B)—Of drooping habit and hardier than *Babylonica*. Valuable on account of its ability to resist severe cold.

Weeping (Aucuparia Pendula) (C)—A beautiful tree, with straggling, weeping branches; makes a fine tree for the lawn; suitable for covering arbors.

MULBERRY.

Teas' Weeping (D)—The most graceful and beautiful of hardy weeping trees, and wholly unlike anything heretofore introduced, forming a perfect umbrella-shaped head, with long, slender, willowy branches, drooping to the ground, parallel with the stem. These hang like the most delicate vines from a hanging basket, and are swayed by the



Tea's Weeping Mulberry.



1. Pine, Dwarf Mugho. See page 68.

2. Spruce, Blue. See page 69.

3. Arbor Vitae Pyramidalis. See page 67.

Evergreen Trees

Evergreens are very desirable, but they are difficult to transplant, and both the time and manner of transplanting should be looked to. They should never be set in the fall. They may be set in August, or after they have started in May; but they should be subjected to as little exposure as possible, and be set with great care.

PRUNING EVERGREENS.

Use the knife occasionally to thicken the growth and preserve the shape. This can be done in April or May, just before the trees start to grow.

ARBOR VITAE (Thuja).

American (Occidentalis) (B)—This is one of the very finest evergreens for hedge. It is very hardy, and if set at the proper time with care and without undue exposure, it may be relied upon to live; but small plants, 12 to 18 inches high, which have been transplanted several times, are preferable. It bears shearing better than any other variety, and may be made a very beautiful and dense hedge or screen to divide grounds, or for any purpose where it is not required to resist cattle or other animals.

Compacta (Parsons) (B)—Foliage light green; habit dwarfish and quite compact.

Douglas' Golden Arbor Vitae (Aurea) (D)—Golden foliage; fine.

Douglas' Pyramidal Arbor Vitae (Pyramidalis) (C)—Pyramidal in form; foliage distinct; somewhat resembling a *Retinospora*.

Globe-Headed Arbor Vitae (Globoso) (D)—Forms a dense, round shrub. Very desirable.

Hoveyi (Hovey's Golden Arbor Vitae) (B)—A seedling from the American; of dwarf habit, globular outline, and bright green foliage. Fine and hardy.

Lobb's Ever Golden Arbor Vitae (Occidentalis Lobbi Semper Aurea)—A very fine growing evergreen, similar to the *T. Lobbi* in habit, but the leaves are shaded from the dark green at the base to bright golden at the top; very showy and distinct.

Nee's Plicate Arbor Vitae (Plicata) (C)—A handsome, hardy variety from Nootka Sound. Foliage plaited, massive, and of a rich, dark green color.

Pyramidalis (C)—The most beautiful of all the Arbor Vitae, having dark green, compact foliage and remarkably erect form; perfectly hardy.

Siberian (Siberica) (C)—One of the best of the genus of this country; exceedingly hardy, keeping color well in winter; growth compact and pyramidal; makes an elegant lawn tree.

Siberian Bronze Arbor Vitae (Occidentalis Wareana Luleceus)—Compact in growth as is the *Wareana*, having a golden bronze foliage which shows especially well in the winter season. One of the best of the hardy variegated arbor vitae.

Tom Thumb (D)—Similar to the Heath-leaved, but more desirable; remarkable for slow, compact growth; valuable for planting in cemeteries and small places, or where large trees are not admissible.

White-Tipped (Douglas) (C)—Ends of the branches tipped with white from the last of June till the following spring.

FIR (Picea).

Balsam or American Silver (Balsamea) (B)—A very regular, symmetrical tree, assuming the conical form even when young; leaves dark green above, silvery beneath.

Nobilis (B)—A lofty, majestic tree, with dark shining green leaves and horizontal branches, regularly arranged; one of the finest evergreens native to America.

Nordmanniana (B)—This is a symmetrical and imposing tree; the warm green of the young shoots contrasts finely with the rich, deep color of the old foliage; the best of the Silver Firs.

Silver Fir of Colorado (Concolor) (B)—Without doubt the finest of the Rocky Mountain evergreens. Tree of graceful habit; broad, handsome foliage; bluish above, silvery beneath. A grand tree, very distinct and exceedingly rare as yet.

JUNIPER (*Juniperus*).

Cypress-Leaved Juniper (*Cupressaefolia*)—A very striking evergreen, with fine Cypress-like leaves; fine and distinct.

Glaucous Virginian Juniper (*Virginiana Glauca*)—The compact, conical habit of this variety, combined with its silvery foliage, renders it very distinct and desirable.

Irish (*Hibernica*) (C)—Very erect and tapering in its growth, forming a column of deep green foliage; a pretty little tree or shrub, and for its beauty and hardiness is a general favorite.

Prostrate Juniper (*Prostrata*) (D)—A beautiful native species, trailing with dense branches, foliage delicate and shining dark green. Well adapted for covering rock work. One of the best.

Savin (*Sabina*) (D)—A low, spreading tree, with handsome, dark green foliage; very hardy and suitable for lawns and cemeteries; can be pruned to any desired shape and made very ornamental.

Savin Variegated Juniper (*Sabina Variegata*)—Identical with the "Sabina" with a handsome variegation on the foliage.

Swedish (*Suecica*) (C)—Similar to the Irish, though not so erect, with bluish green foliage, of somewhat lighter color than the preceding, forming a beautiful pyramidal small tree.

Virginian (*Virginica*) (The Red Cedar) (B)—A well-known American tree, with deep green foliage; makes a fine ornamental hedge plant.

Virginiana Elegantissima Aurea (The Elegant Golden Juniper)—A distinct and beautiful variety of the Cedar, with golden bronze foliage, particularly attractive in winter, when the golden bronze of the young growth is contrasted with the dark green of the older.

Virginiana Schottii (Schott's Cedar)—Forms a dense bush; foliage of a light green color. Hardy and beautiful.

Virginiana Variegata (Variegated Cedar)—A beautiful variety of the Red Cedar with finely variegated foliage.

PINE (*Pinus*).

Austrian or Black (*Austriaca*) (A)—A remarkable, robust, hardy, spreading tree; leaves long, stiff and dark green; growth rapid; valuable for this country.

Dwarf Mugho Pine (*Mugho*) (D)—An upright, small pine, found on the Pyrenees and Alps. Its general form is that of a pine bush, but it has been found growing as high as 40 feet.

Heavy-Wooded Pine (*Ponderosa*) (A)—This is also a noble tree, attaining the height of 100 feet, found abundantly on the north-west coast of America and California. It is perfectly hardy here. It is a rapid grower, the leaves 8 to 10 inches in length, and of a silvery green color.

Scotch (*Sylvestras*) (A)—Also very rapid in its growth. A dark, tall evergreen, with bluish foliage and rugged shoots; hardy, and grows well, even on the poorest soils.

RETINOSPORA (Japanese Cypress).

It comprises many sorts of wonderful beauty. They are natives of Japan, and very few will endure the vigor of our winters without protection. Wherever they can be preserved they will amply repay the efforts made. The small varieties are exceedingly desirable for indoor culture in pots.

Pisafera—A handsome plant with very fine feathery light green foliage.

Plumosa (B)—A variety with fine short branches and small leaves. The soft, plume-like appearance of the foliage gives it its name.

Plumosa Aurea—A striking form of Plume-like Japan Cypress, brilliantly golden through the season; hardy.

SPRUCE (*Abies*).

Alcock's Spruce (*Alcocquiana*) (B)—From Japan. It forms a beautiful tree of close habit. Foliage pale green, silvery underneath. Valuable.

Arizonica Argentia—A very graceful Spruce, light silvery blue foliage, resembling the Concolor rather than the ordinary Blue Spruce.

Blue Spruce (*Pungens*) (B)—This species has been tested at various points on prairies of the North-West with perfect success, enduring a temperature of thirty degrees below zero, in exposed situations, without injury; and also very extensively near Boston, where it has stood out entirely uninjured during the past 16 years. This is not only one of the hardiest, but the most beautiful of all spruces. Miss Bird, in her "Lady's Life in the Rocky Mountains," mentions it as the most attractive tree she has seen, beautiful alike in shape and color. "It looks," she writes, "as if a soft blue powder had fallen upon its deep green needles; or as if a bluish

hoar-frost, which must melt at noon, were resting upon it." Beautiful in color and outline, and hardy, it is a valuable acquisition. Very rare.

Compact Spruce (*Compacta*) (B)—A dense grower, with light green foliage.

Douglas' Spruce (*Douglasii*) (C)—From Colorado. Large conical form; branches spreading horizontal; leaves light green above, glaucous below.

Dwarf Spruce (*Pumila*) (D)—Compact dwarf, and perfectly symmetrical. This variety is especially desirable for small lawns or cemeteries.

Dwarf Compact Spruce (*Pumila Compacta*) (C)—A dwarf variety, growing 5 to 6 feet in height; foliage dark green; habit compact.

Englemanni—A dense, pyramidal grower of the Rocky Mountain type. Has stiff foliage like the Colorado Blue (*Pungens*), and in most cases its fine, glaucous color.

Excelsa Aurea—In growth and habit, the same as the common Norway Spruce, with a decided tinge of golden yellow foliage. New and scarce.

Grandis—Of the Balsam family, similar to the *Nordmanii*, but a more showy evergreen.

Hemlock Spruce, Common Hemlock (*Canadensis*) (A)—When finely grown, almost the handsomest of all evergreens, with delicate, dark glossy foliage, and drooping branches; when old, it loses its conical shape, and assumes irregular and picturesque forms. Should be transplanted young.



Norway Spruce. See page 70.

- Kosteriana** (Koster's Blue Spruce)—Foliage silvery blue, the bluest strain that can be selected. This is the most remarkable and conspicuous of all Conifers for ornamental planting. Owing to its magnificent vivid bluish coloring it constantly attracts the attention of all lovers of the beautiful. Being perfectly hardy in every climate, it can be planted without reserve.
- Maxwellii**—The dwarfist Spruce under cultivation, highly valuable for landscape work, where low evergreens are required. Of low habit, having a spread six times its height.
- Norway Spruce** (*Abies Excelsa*) (A)—One of the handsomest and most popular of evergreens; when young the tree is remarkably rich and luxuriant; as it grows older its branches droop with a fine graceful curl or sweep, some specimens, however, more than others; and when covered with its large pendant cones it is an object exceedingly picturesque and beautiful. Plants of all sizes can be furnished. Makes fine hedges.
- Weeping** (*Inverta*) (C)—In many respects this beautiful tree resembles the Norway Spruce, except that its branches are pendulous. The lateral branches are as drooping as the Willow. A very desirable sort.
- White Spruce** (*Alba*) (A)—A native tree of medium size, varying in height from 25 to 50 feet, of pyramidal form. Foliage silvery gray, and bark light colored. Very hardy and valuable.

YEW (*Taxus*).

- Canadensis** (Canadian)—A low, weeping, broad-spreading bush, dark green foliage and crimson berries. Entirely hardy, and very valuable for surfacing beds or forming groups.
- Elegantissima** (D)—A beautiful tree of small, dense habit; leaves striped with silver, frequently turning to light yellow.
- Washingtonii** (D)—Vigorous in growth, and rich in healthy green and golden yellow foliage; one of the best.

Flowering Shrubs

PRUNING SHRUBS.

Many persons trim and shear them into regular shape, imagining that regular outline adds to their effect and beauty. While symmetry and regularity of form are to be admired in a shrub, this quality should never be gained at the expense of health and natural grace.

Each shrub has peculiarities of habit and foliage, and we should aim to preserve them as far as possible. Judicious pruning to secure health and vigor is necessary, but trimming all kinds of shrubs into one form shows a lack of appreciation for natural beauty, to say the least. Weigelas, Deutzias, Forsythias, Mock Orange, Spiraeas and Lilacs flower on the wood of the preceding year's growth, hence the shrubs should not be pruned in winter or spring, but in June, after they have finished flowering, when the old wood should be shortened or cut out, thus promoting the growth of the young wood, which is to flower the following season.

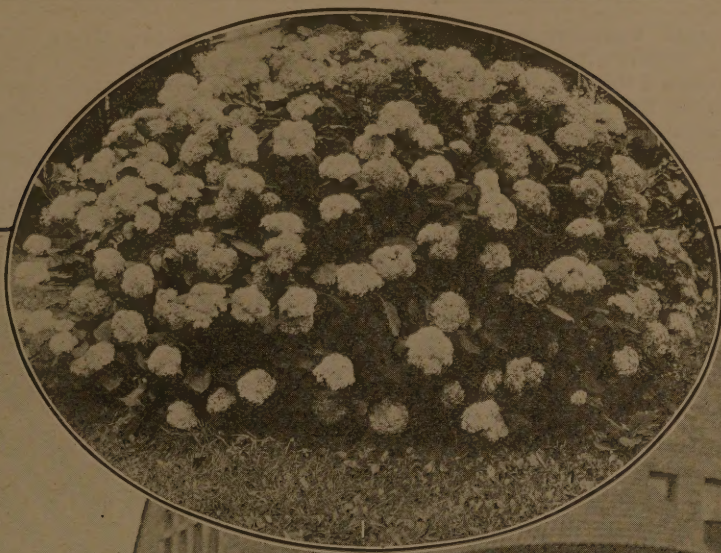
Althæas and *Honeysuckles* may be trimmed during the winter or early spring, but the branches should only be reduced enough to keep them in good shape. The old growth should be occasionally thinned out and the suckers and root sprouts removed when they appear. The best time, however, for pruning all shrubs is when they have done flowering. The *Hydrangea paniculata grandiflora* should be severely cut back and thinned early in spring.

ALTHEA or ROSE OF SHARON (*Hibiscus*).

These are fine shrubs, and especially valuable because of their flowering in the fall, when all other shrubs are out of bloom. Entirely hardy and easy of cultivation.

Boule de Feu (C)—A fine variety of vigorous growth. Flowers large, very double and of beautiful violet red color.

Coerulea Plena (C)—Double blue Althea.



3

2

1. *Hydrangea Arborescens* Stirilis. See page 77.
2. *Spiraea Van Houtte*. See page 82. 3. *Barberry Thunbergii*. See page 72.

- Double Variegated, or Painted Lady** (*Variegatus Flore Plena*) (C)—Fine double flowering, variegated pink and white.
- Double Lilac** (*Pæoniflora*) (C)—Very handsome, double lilac-flowering.
- Double Purple** (*Purpurea*) (C)—Double, reddish purple.
- Double Red** (*Rubra Pleno*) (C)—Double red flowers.
- Jeanne d'Arc** (C)—One of the best new shrubs. Flowers pure white, double; plant, a strong grower.
- Leopoldii Flore Pleno** (C)—Large flowers, very double, flesh color, shaded rose; leaves lacinated; fine.
- Totus Albus** (D)—Single, pure white; very fine.
- Variegated-Leaved Double Purple** (*Flore Pleno fol. Variegatis*) (C)—A very showy kind; distinct, leaves variegated with light yellow; flowers double purple exceptionally fine.
- Violacea** (*Flore Pleno*) (C)—Double flower of violet blue color and of medium size.

ALMOND.

- Dwarf Double Rose-Flowering** (*Prunus Japonica*) (D)—A well-known, beautiful small shrub, with handsome, double pink flowers early in the spring.
- Double White-Flowering** (*Japonica Alba*) (D)—A pretty sort, with double white flowers.

ARALIA.

- Angelica Tree** (C)—A handsome and distinct shrub from Japan, with large tripinnate leaves and spiny stems; flowers white, in large spikes, in September.

AZALEAS (Hardy Ghent).

This class of Azaleas are sufficiently hardy for open air culture, and will stand our winter without protection, though a mulching of straw or loose litter is desirable at least until they become established. They are among the most beautiful of flowering shrubs, presenting the best effect where massed in beds. They require no other than an ordinary garden soil, with moderate fertilizing each year.

These plants are also imported, and the uncertainty of obtaining varieties ordered makes it necessary that the selection of varieties be left with us. We can supply named sorts, if desired, but the better way is to order by colors, which are as follows:—

Red,	White,	Purple,	Pink,	Orange,
Yellow,	Scarlet,	Straw Color,	Variegated.	

AZALEAS, MOLLIS.

These are the hardiest Azaleas grown. We can furnish them in same colors as named above.

AZALEAS, CHINESE.

These are less desirable, half hardy, and require the protection of conservatory, greenhouse or frames during winter. Otherwise they may be treated the same as the Ghents. The same remarks as to kinds and colors applied to the Ghent Azaleas apply to these.

BARBERRY (*Berberis*).

- European** (*Vulgaris*) (D)—A fine shrub with yellow flowers in drooping racemes, produced in May or June, followed by orange scarlet fruit.
- Purple-Leaved** (*Purpurea*) (D)—A very handsome shrub, growing from three to five feet high, with violet-purple leaves and fruit. Makes a fine ornamental hedge.
- Thunberg's Barberry** (*Thunbergii*) (D)—From Japan. A pretty species, of dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge. Bright red berries, hang all winter.



Sprig of Barberry Thunbergii.

BLADDER SENNA (*Colutea*).

Tree *Colutea* (*Arborescens*) (C)—Native of the south of Europe. A large shrub, with small delicate foliage, and yellow, pea-blossom-shaped flowers in June, followed by reddish pods or bladders.

CALYCANTHUS, or SWEET-SCENTED SHRUB.

***Calycanthe* (D)**—The wood is fragrant, foliage rich, flowers of rare chocolate color, having a peculiarly agreeable odor. Flowers in June, and at intervals afterwards.

CLETHRA.

(C)—Sweet pepper bush. Valuable because of its beauty and perfume. Flowers pure white, in spikes three to six inches long. Blooms in August. Very hardy, and should be found in every collection.

CARAGANA (*Pea Tree*).

Siberian Pea Tree (*Arborescens*) (C)—A shrub or low tree. Native of Siberia and China. Pea-shaped yellow flowers in May.

CURRENT (*Ribes*).

Alpina (D)—A good old variety. Small yellow flowers in early spring.

Crimson Flowering (D)—Produces an abundance of crimson flowers in early spring.

Gordon's Currant (*Gordoninum*) (D)—A hybrid between *aureum* and *sanguineum*. A hardy and profuse blooming shrub. Flowers crimson and yellow in pendant bunches in May.

Yellow-Flowered, or Missouri Currant (*Aureum*) (D)—A native species with glabrous, shining leaves and yellow flowers.

DAPHNE.

Mesereum Pink (*Mezereum*) (E)—Flowers appear very early, before the leaves, and are very beautiful.

Trailing (*Cneorum*)—A very low evergreen shrub, blooming at intervals, from May to November. Flowers rose color.

DEUTZIA.

This valuable species of plants comes to us from Japan. Their hardiness, luxuriant foliage and profusion of attractive flowers, render them deservedly popular among flowering shrubs. The flowers are produced in June, in racemes four to six inches long.

Candidissima (Double White Flowering) (D)—One of the finest shrubs, producing snow-white flowers of great beauty, and valuable for bouquets and baskets.

Double Flowering (Crenata Flore Pleno) (D)—Flowers double white, tinged with rose. One of the most desirable flowering shrubs in cultivation.

Kosteriana—A slender limbed variety closely allied to the *Gracilis* class. New; flowers pure white; a profuse bloomer and valuable for forcing.

Lemoinei (D)—A low-growing shrub, like *Deutzia Gracilis*, although a great improvement on that variety, which it probably will supplant. Its flowers, when open, are cross-shaped, and it is still more showy than *Gracilis*.



Deutzia Lemoinei.

Parviflora (D)—From Northern China. A stout shrub with upright stems, covered in early June with creamy white flowers, prettily arranged in large corymbs. One of the most beautiful of all the *Deutzias*.

Pride of Rochester (D)—A variety which excels all others in size of flower, length of panicle, profuseness of bloom, and vigorous habit. A charming acquisition.

Rough-Leaved (*Scabra*) (D)—An exceedingly profuse white-flowering shrub.

Slender Branched (*Gracilis*) (D)—A charming variety, introduced by Dr. Siebold. Flowers pure white, and so delicate that they are very desirable for decorative purposes.

DOGWOOD (*Cornus*).

Elegantissima Variegata (D)—One of the finest variegated shrubs; of rapid growth; foliage beautifully marked with creamy white, and tinged with red, while some leaves are entirely white. Should be in every collection.

Red Branched (*Sanguinea*) (D)—A native species; very conspicuous and ornamental in the winter, when the bark is a blood-red.

Siberica (Red Siberian Dogwood)—An upright shrub with bright blood-red bark. Native of Siberia. Leaves dark green, pale beneath, 2 to 3 inches in length. Flowers very white. Fruit light blue or bluish white. Very beautiful, and especially in early winter, when bark is entirely colored.

ELDER (*Sambucus*).

A well-known shrub, which blossoms in the spring, and afterwards is covered with handsome berries. There are several varieties.

Cut-Leaved Elder (*Taciniata*) (C)—A valuable variety, with elegantly divided leaves; one of the best cut-leaved shrubs.

Golden (Aurea) (C)—A beautiful variety, with light yellow leaves, which hold their color well, and render the plant very conspicuous and effective.

Variegated-Leaved Elder (C)—Of strong, healthy growth; foliage mottled with yellow and white. One of the best variegated-leaved shrubs.

ELAEAGNUS (Olive).

Augustifolia (Russian Olive) — Introduced from the Northern parts of Russia by the Menonites, and now grown with great success in the Canadian North-West. The only shrub of its color of leaves which flourishes generally. Its clean, dark limbs, silvery twigs and leaves, sweet flowers and golden fruit all conspire to make it a most desirable tree for the lawn. The fragrant sweetness of its flowers being wafted by the winds for a long distance. Beautiful when small, and all season from flowers to fruit it is attractive. The flowering branches make a beautiful decoration of themselves. Highly recommended.

Longipes—A native of Japan. The merits of this very attractive shrub have only been appreciated lately, but it is coming into general favor more and more each year. The Longipe variety blooms about May 15th, and bears a profusion of small greenish silvery yellow flowers. The fruit is edible, has a pleasant taste, and makes excellent sauce. The berries hang some weeks in good condition. Berries red in color, foliage silver-hued, clean and fine. We advise all who desire a novelty in the line of hardy shrubs to add *Elaeagnus Longipes* to their collection.

EUONYMUS (Burning Bush, Strawberry Tree) (C.)

A very ornamental and showy bush, whose chief beauty consists in its brilliant berries, which hang in clusters from the branches until mid-winter; berries rose-colored; planted with a background of evergreens, the effect of contrast is very fine.

European Euonymus (Europæus) (B)—Forms a tree sometimes 30 feet in height. Fruit rose colored.

EXOCHORDA.

Grandiflora (C)—A most beautiful shrub, producing large white flowers in May. A native of North China, difficult to propagate, and hence it will always be rare.

FILBERT (*Corylus*).

Golden-Leaved Filbert (Aurea) (D)—A rare and beautiful shrub. Foliage large, bright golden color. Appears to fine advantage planted with the Purple-leaved Filbert.

Purple-Leaved (Corylus Avellana Atropurpurea) (C)—A vigorous shrub, with large, deep purple leaves; very ornamental; produces good fruit.



Golden Elder (*Sambucus Aurea*).

FORSYTHIA or GOLDEN BELL.

- Fortune's Forsythia** (Fortunei) (D)—Growth upright, foliage deep green, flowers bright yellow.
- Intermedia** (D)—Flowers bright golden; foliage glossy green, like *Viridissima*, but hardier than that variety. Valuable.
- Viridissima** (D)—A very singular and quite ornamental shrub. Its branches, in the early spring, before the leaves appear, are covered with bright golden yellow, pendulous flowers.
- Weeping Forsythia** (Suspensa) (D)—A shrub resembling *Fortunei* in its flowers, but the growth is somewhat drooping.

FRINGE TREE.

- Purple, Venetian Sumach, or Smoke Tree** (*Rhus Cotinus*) (C)—A very elegant and ornamental large shrub, with curious hair-like flowers, which being of a pinkish brown color, give it the names "Purple Fringe" and "Smoke Tree." The blossoms are in July, sometimes literally covering the tree, remaining all summer.
- White** (*Chionanthus Virginica*) (C)—An entirely different plant from the preceding; has handsome, large foliage, and racemes of delicate white flowers, that hang like finely-cut shreds, or fringes of white paper.

GLOBE FLOWER, or CORCHORUS (*Kerria Japonica*).

A slender, green-branched shrub, five or six feet high, with globular yellow flowers, from July to October.

- Double-Flowered Corchorus** (*Flore Pleno*) (E)—Of medium size; double yellow flowers.
- Ramulis Var. Aureis** (D)—A curious dwarf variety, having its stem striped with yellow and green; very pretty in winter, when the plant is divested of its leaves.

HALESIA (Snow Drop Tree).

- Silver Bell** (C)—A beautiful, large shrub, with handsome white, bell-shaped flowers in May. Very desirable.

HAMAMELIS (Witch Hazel).

- Virginica** (D)—A tall shrub; yellow flowers, late in autumn, just before the leaves fall.

HONEYSUCKLE (*Lonicera*).

- Alberti** (D)—Violet, bell-shaped flowers; leaves narrow. A very hardy variety, somewhat creeping.
- Fragrant Upright Honeysuckle** (*Fragrantissima*) (D)—A spreading shrub, with deep green foliage and very fragrant, small flowers, which appear before the leaves; foliage almost evergreen; most desirable. *
- Grandiflora Alba** (D)—A variety of upright habit, with very large pure white flowers; fine.
- Ledebour's Honeysuckle** (*Ledebouri*) (D)—From California. A distinct species with red flowers in May.
- Morrowii** (D)—A fine variety from Japan, valuable for its handsome red fruit.
- Splendens** (D)—A fine variety of the Tartarian Honeysuckle; flowers large, dark rose, with darker centre. A variety of merit.
- Standish's Honeysuckle** (*Standishii*) (D)—Native of China. Flowers creamy white, fragrant, appearing in May, before the leaves; one of the earliest flowering shrubs.



Sprig of Honeysuckle Tartarian.

and striking in its general characteristics it is coupled with a grace and elegance not found in the old favorite. Grows four to ten feet high and adapted for single specimens, groups or hedges.

Otaksa (D)—Foliage a beautiful deep green. Produces immense clusters of rose-colored flowers in profusion in July. Should be planted in tubs and protected in winter.

Paniculata Grandiflora (C)—A fine, hardy shrub, growing to the height of eight or ten feet; flowers white, in great pyramidal panicles a foot long, produced in August or September, when most other shrubs are out of bloom. Very elegant and showy.

Red Branched (Ramulis Coccineis) (D)—This is one of the most important plants of recent introduction. A fine, free bloomer, producing large and magnificently formed trusses, of deep rose-colored flowers from every shoot. The best variety for forcing and pot culture.

Souv. De Claire—Similar to Thomas Hogg, but an improvement on that variety. Produces immense clusters of pure white flowers.

Thos. Hogg (D)—Bears a great profusion of pure white flowers.

Tartarian Honeysuckle (Tartarica) (D)—Pink flowers, which contrast beautifully with the foliage. This and *Grandiflora* appear to fine advantage planted together.

HYDRANGEA.

Arborescens Sterilis (Hills of Snow)—

This fine variety of the *Hydrangea* is fast taking the place in public favor so long held by *Hydrangea Paniculata Grandiflora*. It is perfectly hardy and of easy culture. The flowers are purer white than those of *Hydrangea P. G.*, are quite as large, and are borne in as great or greater profusion, remaining on the bush long after the foliage has disappeared, and well into the winter.

Hydrangea Arborescens Sterilis has all the good qualities of *Hydrangea Paniculata Grandiflora* and others peculiarly its own. While quite as bold



Tree Hydrangea.



Hydrangea (Paniculata Grandiflora). See page 77.

LILAC (Syringa).

Lilacs are universal favorites, and are beautiful, both in color and foliage. The flowers are in large showy panicles, ranging from white to various shades of lilac, purple and red. In some varieties the flowering clusters are produced so freely as to almost hide the foliage. The fragrance of the flowers is sweet and rather heavy if bunches of bloom are taken into the house, but in the freshness of the garden the odor is beautiful.

The lilac is particularly adapted for Canadian culture and succeeds well east and west. Some of the most beautiful specimens grown anywhere are in the cold North-West.

For years we have been collecting, from various sources, the best varieties, and take pleasure in offering a selection of the best varieties known, including, among new sorts, the cream of the production of the celebrated French raiser, Mr. Lemoine, whose Japan Hybrid Lilacs have been the wonder of the horticultural world.



Lilac.

The improvement in the Lilac, especially in the double sorts, during recent years, has been marvellous, and all lovers of this flower will be delighted with these novelties. In size, form and color they far surpass the old favorites, and we confidently recommend them to our patrons. Nothing recently introduced could prove so generally popular as these Lilacs.

Dwarf Lilac (Nana) (D)—Distinct, large and compact spike of dark, reddish purple fragrant flowers, very fine.

Japonica (C)—A species from Japan, becoming a good sized tree. Foliage dark green, glossy, leathery; flowers creamy white, odorless, in great panicles. A month later than other Lilacs.

Josikaea (Josika's or Chinonanthus-leaved Lilac. Hungarian Lilac) (C)—A fine, distinct species, of tree-like growth, with dark, shining leaves and purple flowers in June, after the other Lilacs have done flowering.



Lilac Villosa.

Rothomagensis (C)—Flowers a deep blue. Very free bloomer and valuable.

Rothomagensis Alba (C)—Flowers single; color pure white.

Rothomagensis Rubra—A distinct hybrid variety with reddish flowers; panicles of great size and very abundant.

Villosa (C)—Another new species from Japan, with foliage like that of the white fringe tree, and rosy-pink blossoms. A distinct new color in lilacs. This will be a surprise and delight to all amateurs in lilacs. We have never seen a lilac so profuse in bloom. The flower has a faint purplish tinge at first, fading to white. The trusses are large and full, and astonishingly abundant. The plants are in tree form, with none of the straggling habit of the common lilac. We confidently recommend it as one of very best of new things.

NEW JAPAN HYBRID LILACS

Single-Flowered Varieties.

Bluatre—A free growing sort with heavy spikes of bloom, having a decided blue shade. One of the best of this color.

Charles the Tenth (C)—A strong, rapid grower, with large shining leaves, and reddish purple flowers.

Common Purple (Vulgaris Purpurea) (C)—Purple colored flowers.

Common White Lilac (C)—Cream colored flowers.

Frau Dammann (C)—One of the newer lilacs, of great merit; large panicles; flowers of medium size; pure white. Flowers freely.

- Louis Van Houtte** (C)—Large panicles of dark red flowers; extra.
Ludwig Spaeth (C)—This is also of recent introduction, and one of the best in our collection. Flowers large, single, dark red. Superb.
Marie Legraye (C)—Color white; large trusses of six to twelve in a bunch; free bloomer, and makes grand show by itself or with other kinds.
Phillemon (C)—Color deep rosy lilac; very compact truss; very striking.
President Massart (C)—Red in bud, purple when open; large panicle; fine.
Princess Alexandria (C)—Very fine bloomer, and the best grower in all the new lilacs. Flowers pure white.
Rubra de Marley (C)—A fine sort, producing reddish purple flowers.

Double-Flowered Varieties.

- Abel Carriere** (C)—Flowers large, blue, reverse of petals rose; fine.
Alexander d'Humboldt (C)—Color mauve, very double, immense panicles in clusters.
Alphonse Levalie (C)—Color light purple, with blue cast, late bloomer, immense truss.
Belle de Nancy (C)—Color light purple, bluish tinge; late, with large trusses.
Charles Joly (C)—Very dark reddish purple; superb.
Comtesse Horace de Choiseul (C)—Large flower; porcelain blue; superb.
Condorcet (C)—Color lavender.
De Jeussieu (C)—Color deep rose.
De Humboldt (C)—Violet rose; fine.
Doyen Keteleer (C)—Very large; lavender; superb.
Grand Duc Constantin (C)—Large, compact, lilac color; fine.
Jean Bart (C)—Color pink.
La Mauve (C)—Color delicate shade of mauve; very double and large trusses.
Leon Simon (C)—Color lavender, carries trusses fifteen inches long; very distinct and pretty.
Louis Henry (C)—Rosy lilac; extra fine.
Madame Casimir-Perier—White flowers in large, graceful panicles. A profuse bloomer. One of the very best sorts.
Madame Abel Chatenay (C)—Large panicle; double white; very fine.
Mad. Jules Finger (C)—Color bluish, almost pink.
Madame Lemoine (C)—New; flowers rose shaped, pure white, perfectly double. About the only double white lilac grown. A beauty in every respect.
President Carnot (C)—Color pinkish; the most free bloomer of all the doubles.
President Grevy (C)—Bears long panicles of single flowers, three-fourths of an inch in diameter. Flowers very large, double, and a beautiful shade of blue in color.
Rubella Plena (C)—Color lavender tinted blue.
Souvenir de L. Thibaut (C)—Very large flower; very double, reddish purple; a fine variety.
Tournefort (C)—Color clear lavender; truss of largest size.
Virginity (C)—Color bluish, almost pink; very distinct in color from all lilacs.
William Robinson—Flowers violet.

PLUM (*Prunus*).

- Pissardi** (C)—The finest purple-leaved small tree or shrub of recent introduction. The young branches are a very dark purple; the leaves, when young, are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop, late in autumn. Flowers small, white, single.

PRIVET (*Ligustrum*).

The **Privet** in all its varieties deserves attention as an ornamental plant. It is almost an evergreen, and grows freely in all soils; is compact and regular in its form, and bears shearing to any extent. The whole collection which we offer makes a very interesting group on the lawn; the flowers appear in June and July.



Japan Quince.

Double Scarlet Japan Quince (D)
A handsome variety, with semi-double scarlet flowers. Extra.

ST. JOHN'S WORT (Hypericum).

Moserianum (E)—A charming shrub, of dwarf habit, producing large single yellow flowers in great profusion during the summer.

SNOWBALL (Viburnum).

Dilatatum (D)—From Japan. A low-spreading shrub; scarlet fruit in autumn.

Early White Lantana-Leaved Viburnum (Lantanat) (C)—A large, robust shrub, with soft, heavy leaves and large clusters of white flowers in May, succeeded with red fruit; retains its foliage very late.

Guelder Rose, Snowball Tree (Sterilis) (C)—A well-known favorite shrub, of large size, with globular clusters of pure white, sterile flowers the latter part of May.

Amoor River Privet (Amirenses)—

A large shrub with upright branches, growing 8 to 12 feet tall. Native of China. Leaves dark green and lustrous, tardily deciduous, or in South nearly evergreen. Flowers white, in erect panicles. Splendid for hedges.

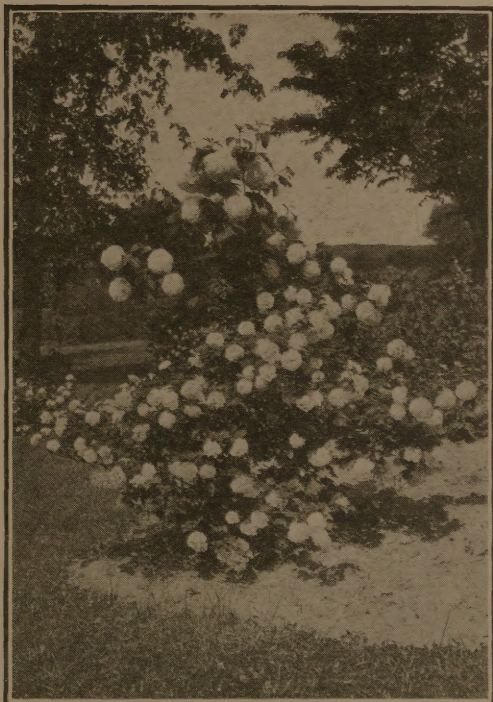
California (Ovalifolium) (D)—A vigorous, hardy variety, of fine habit and foliage; valuable for hedges. See also hedge plants.

Ibota (Chinese Privet) (D)—A valuable new shrub, native of China and Japan. Flowers large, white, very fragrant, produced in great profusion; leaves long and shining; one of the hardiest of the Privets, and distinct. A charming shrub which will be prized for its fragrant flowers, as well as for its handsome foliage as a hedge.

Vulgare (English or European Privet) (D)—Narrow foliage, showy white flowers.

QUINCE JAPAN (Cydonia).

Blush (D)—A beautiful variety, with white and blush flowers.



Snowball.

High, or Bush Cranberry (*Opulus*) (C)—Both ornamental and useful. Its red berries resembling cranberries, esteemed by many, hang until destroyed by frost late in the fall; resembles the Snowball in wood and foliage.

Plaited-Leaved Viburnum (*Plicatum*) (D)—From North China. Of moderate growth; handsome plicated leaves, globular heads of pure white neutral flowers early in June. It surpasses the common variety in several respects. Its habit is better, foliage much handsomer, flowers white and more delicate. One of the most valuable flowering shrubs.

SNOWBERRY.

Symphoricarpus. St. Peter's Wort, or Wax-berry.

Red-fruited or Indian Currant (*Vulgaris*) (D)—A shrub of very pretty habit. Foliage, flowers and fruit small; fruit purple; hangs all winter.

Snowberry (*Racemosus*) (D)—A well-known shrub, with small pink flowers, and large white berries that hang on the plant part of the winter.

SPIRÆA.

Anthony Waterer (D)—A fine new dwarf spiræa, with dark crimson flowers. One of the finest.

Arguta (D)—Of dwarf habit; flowers clear white. The best early flowering white spiræa. Early May.

Billardi (D)—Fine and distinct, with rose-colored flowers in spikes.

Bumalda (D)—A very handsome species from Japan. Habit dwarf, but vigorous; foliage narrow, flowers rose-colored, appearing in great profusion during mid-summer and autumn.

Callosa Alba (D)—A white flowering variety, of dwarf habit; very fine, remains in flower all summer.

Double Lance-Leaved (D)—A beautiful double-flowering variety. One of the best.

Douglass (D)—Flowers somewhat resemble the Billardi; rose colored, and in spikes. Flowers in August.

Golden-Leaved (*Foliis Aureis*) (D)—A beautiful dwarf plant with golden yellow foliage. It keeps its color the entire season, and creates a very pleasing effect among other shrubs.

Prunifolia Flore Pleno (D)—A beautiful shrub from Japan, with double white flowers in May.

Reevesii, or Lance-Leaved (D)—A charming shrub, with narrow pointed leaves and large round clusters of white flowers that cover the whole plant.

Ulmifolia, or Elm-Leaved—Very similar in flower and time of blooming to the Van Houtte. The foliage is very attractive and is more of the cut leaf form than the Van Houtte, somewhat resembling the Elm.

Van Houtte's (*Van Houttei*) (D)—The most showy of all the Spiræas, and one of the very best flowering shrubs in cultivation. The plant is a rather tall, upright grower, with long, slender branches that droop gracefully with their weight of foliage and flowers. Foliage curiously lobed and rounded, of a lively green color. Flowers pure white, in great clusters and whorls, forming cylindrical plumes two or three feet long. Few



Spiraea Van Houtte.

plants present a more charming appearance when in blossom, or are more tasteful at other times. This is one of the hardiest of all the *Spiræas*.

STRAWBERRY TREE.

(See *Euonymus*.)



A Screen of Sumach.

SUMACH (*Rhus*).

Dwarf Shining Sumach (*Copallina*) (D)—Beautiful shining green foliage, changing to rich crimson in autumn. Greenish yellow flowers in August.

Fragrant Sumach (*Aromatica*) (D)—A native variety, exhaling a strong odor. Flowers greenish white; leaves lobed.

Laciniata (Cut-leaved Staghorn Sumach)—A very graceful shrub, with delicate fernlike leaves, most brilliant in the autumn.

Smooth Sumach (*Glabra*) (C)—Very effective in autumn, with its crimson seeds and foliage.

Typhina Laciniata (Cut-leaved Staghorn Sumach)—A large-growing, bold and effective shrub, with delicate fernlike foliage and brilliant scarlet fruit in the autumn.

SYRINGA (Philadelphus).

European Fragrant or Mock Orange (*Philadelphus Coronarius*) (C)—A well-known very hardy shrub, with showy white flowers, which are very fragrant.

Golden-Leaved (*Folii Aueis*) (D)—A beautiful new variety, with bright yellow foliage, which affords pretty contrasts with other shrubs, especially with the purple-leaved varieties.

Large Flowering (*Grandiflorous*) (C)—Large, showy flowers. A valuable variety.

Lemoine's Erect (*Lemoinei Erectus*) (C)—A charming variety, of upright growth; flowers small, yellowish white, fragrant, completely covering the plant.

Purpurea—A new variety, and strikingly handsome. This *Syringa* comes in as a decided acquisition, a purple flowering variety, entirely distinct from older kinds, the base of the flower petal being tinged with purple.

In the spring of the year, when so many flowering shrubs are white in color, the *Purpurea* comes in, relieving this monotony. Flowers are large; the purple and white shading producing a most striking effect. We regard the *Syringa Purpurea* as one of the most valuable specialties in the shrub line we have introduced in recent years.



Syringa or Mock Orange.

TAMARIX (Tamarisk).

Africana—Strong, slender-growing, irregular shrubs with feathery foliage and small delicate flowers, borne profusely on gracefully bending branches.

Caspica—Very graceful habit and striking color.

Hispida Æstivalis—New. Very vigorous, branches 5 to 7 feet in one season, and covered in July and August with light rosy carmine flowers.

Odessa—Very similar to *Africana*, with the exception of being lighter in color and a later bloomer.

WEIGELA (Diervilla).

Amabilis or Splendens (D)—Of robust habit; large foliage and pink flowers. Blooms freely in autumn. A great acquisition.

Candida (D)—Thought by some to be the best of all. Of vigorous habit; an erect grower; flowers pure white, produced in great profusion in June, the plants continuing in bloom through the summer.

Desboisii (D)—A beautiful variety, with deep, rose-colored flowers, resembling *Rosea*, but much darker. One of the darkest and best.



Weigela Eva Rathke.

Eva Rathke (D)—Dark red, dwarf habit, very profuse bloomer. The handsomest of the Weigelas. Blooms middle to last of June.

Floribunda (Crimson Weigela) (D)—We take pleasure in calling the attention of our customers to this beautiful Weigela. The flowers are dark crimson, with the white stamens projecting from them, reminding one somewhat of Fuchsia flowers. It blooms in spring with other Weigelas; but if plants are topped off after young growth has been made, they bloom profusely in the fall. There is a ready sale found for it on account of its beautiful color; and it is conceded to be one of the best of the numerous varieties of Weigelas.

Hortensis Nivea (D)—Flowers pure white, retaining their purity during the whole time of flowering; foliage large.

Rosea (D)—An elegant shrub, with fine, rose-colored flowers. Introduced from China by Mr. Fortune, and considered one of the finest plants he has discovered. Quite hardy. Blooms in May.

Sieboldi Alba Marginata (D)—Of upright habit. When the leaves are young the variegation is yellow; when they mature it becomes silvery white; flowers rose-colored. A splendid variegated-leaved shrub.

Stelzernii (D)—A very showy variety and profuse bloomer, the entire branches being covered with bloom. Flowers fine rose-colored. A very attractive sort and worthy of large cultivation.

Variegated-Leaved Dwarf Weigela (D)—Of dwarf habit, and possessing clearly defined, silvery variegated leaves; flowers nearly white. It stands the sun well, and is one of the best dwarf, variegated-leaved shrubs.

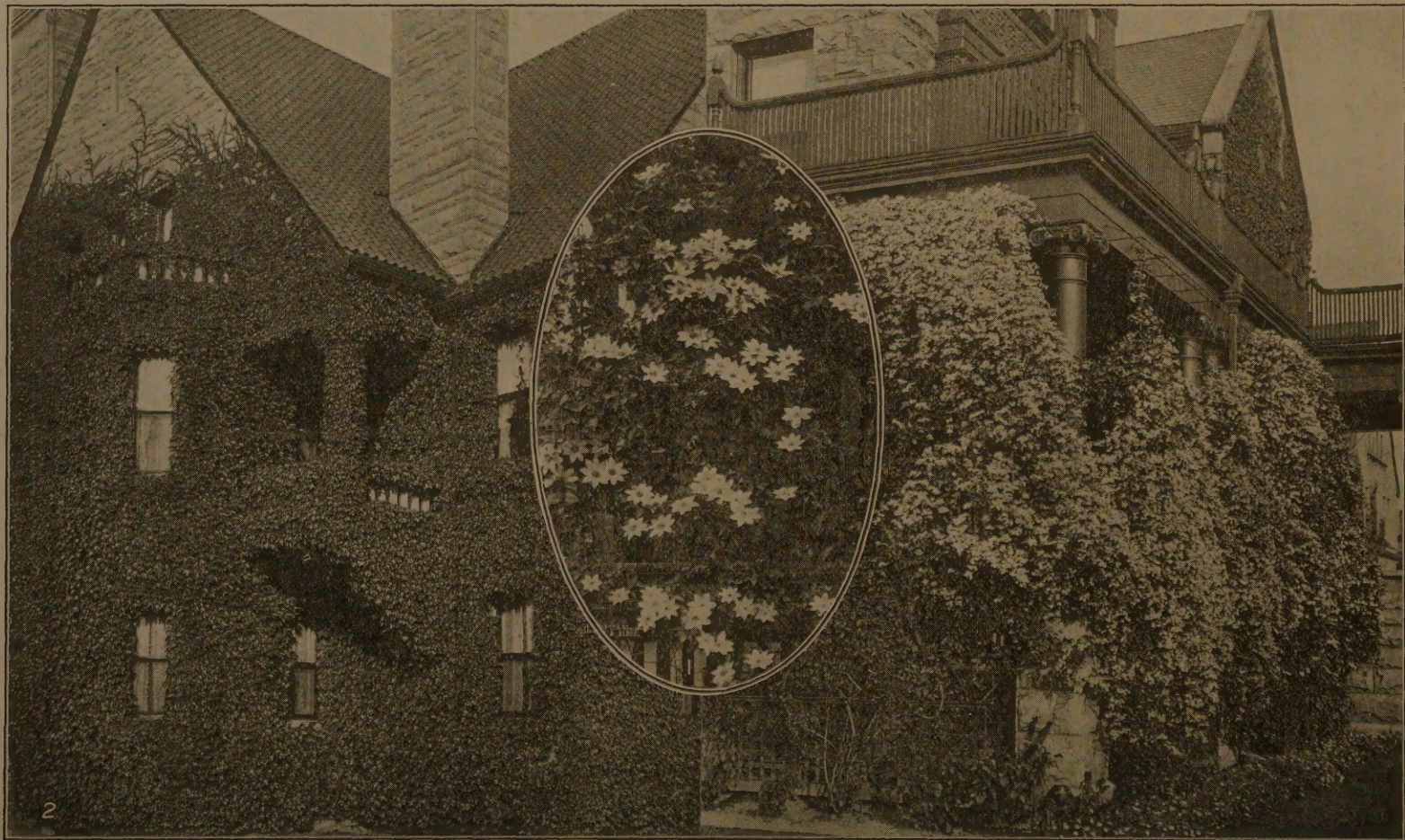
Climbing Shrubs

AMPELOPSIS.

American Ivy, or Virginia Creeper (Quinquefolia)—A native vine, of rapid growth, with large, luxuriant foliage, which in autumn assumes the most gorgeous crimson and purple coloring.

Engelmanni—This is the clinging form of the well-known Virginia Creeper. The leaves are much thinner and smaller than the ordinary variety, and the whole plant lacks the coarseness that characterizes a Quinquefolia, and it clings to walls like the Ivy. The fall coloring is exceedingly brilliant, and in every way it is vastly superior to the common form, which is not used where the new variety is known and can be had. It is the only clinging vine that will successfully withstand the severe climate of the North-West and other cold sections where the Boston Ivy will not succeed.

Purpurea—A variety similar to the Quinquefolia in growth; the leaves, however, are finer and of the most beautiful purple coloring. Looks well planted along with the Virginia Creeper. Perfectly hardy and a splendid climber.



2. *Ampelopsis Veitchii* (Boston Ivy). See page 87.

1. *Clematis Henryi*. See page 87.

3. *Clematis Paniculata*. See page 87.

Veitchii (Boston Ivy)—Leaves a little smaller and more ivy-like in form than the foregoing. Overlapping each other, they form a dense sheet of green. It grows rapidly and clings to the surface of even a painted brick wall with great tenacity. The foliage is especially handsome in summer, and changes to a scarlet crimson in autumn. For covering walls, stumps of trees, rocks, etc., no plant is more useful or beautiful.

"Of all climbers there is, of course, nothing for clinging to a wall without support equal to the *Ampelopsis Veitchii*, alias Boston Ivy, alias Japan Ivy. It will grow on and adhere to glass as well as a brick wall. It should always be planted close to the wall, but a cubic foot or so of good soil prepared for it. Dormant plants should always be planted, for any growth made under glass will be injured by late frosts. The root can be strong, but all growth that will be of any use must start from the bottom, and do its own climbing. It's a little slow the first year, and sometimes brings a growl from a customer, but from that on its progress is rapid. Millions are planted, and cover mansions, cottages, and churches throughout the land, and millions more will be planted."—Editor "Florists' Review."

AKEBIA.

Quinata—A fine, rapid-growing climber, with dark green leaves and purple blossoms in early summer.

ARISTOLOCHIA, or DUTCHMAN'S PIPE.

Sypho—A rapid-growing vine, with magnificent foliage ten to twelve inches in diameter, and curious pipe-shaped yellowish brown flowers.

CHINESE MATRIMONY VINE.

A general utility hardy climbing vine that will overcome any obstacle to growth and flourish everywhere. Every new shoot produces handsome purple flowers and, later, a prodigious crop of scarlet berries, nearly an inch long.

CLEMATIS.

The different varieties and species of *Clematis* now in cultivation are of the highest beauty and utility. These plants are trained on trellises, and over porches and pillars; they are also planted in beds and the stems allowed to run upon the ground, being pegged down to keep them in place, thus producing great masses of bloom, which make a grand appearance, especially when contrasting colors are in proximity. All are hardy, of easy growth, and will adapt themselves to nearly or quite all soils. They will make themselves at home in any good garden.

Henryi—This is the finest of all white *Clematis*, and should find a place in every collection. It is not only a vigorous grower—it is a remarkably free and continuous bloomer, beginning with the earliest and holding on with the latest. Flowers large, of a beautiful creamy white, consisting generally of from six to eight spreading sepals. Unfortunately art cannot produce a picture corresponding in any degree to the wealth of beauty found in the flowers of this variety. Especially desirable. June to October.

Jackmanni—This is, perhaps, the best known of the finer perpetual *Clematis*, and should have credit for the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth, and an abundant and successful bloomer, producing flowers until frozen up. The flowers are large, of an intense violet purple, remarkable for its velvety richness. Though raised in 1862—since which time many new varieties have been raised and introduced—the *Jackmanni* has no superior, and very few, if any, equals. July to October.

Madame Edouard Andre—New. A free growing *Clematis* of the *Jackmanni* type. Flowers profusely, large in size, crimson in color. Very fine. It has been awarded the first premium gold medal at the Horticultural Exhibition at Tours, and also first premium at Paris. June to October.

Paniculata—A new, hardy sort; fragrant, strong, and one that will give entire satisfaction. Blooms so freely that the greater part of the foliage is hidden

from view. The stems bearing the flowers are about five inches in length, and the color of the flowers pure white, star-striped, about an inch in diameter. They will last for days as cut flowers. Plant is a rapid strong grower, with an abundance of foliage, and is seldom attacked by insects. September.

Ramona—This Clematis originated at Newark, N.J. It is a strong, rampant grower, very much stronger than Jackmanni, often growing ten or twelve feet the first season. It is a true, perpetual bloomer, flowers appearing on the last year's growth, and on the new shoots, giving an abundance of bloom all through the season. In size the flower surpasses any of the old sorts, often six to seven inches in diameter, and of the most perfect shape. Color deep, rich lavender. Distinct from any other sort, and very attractive. Perfectly hardy and remarkably vigorous. June to October.

EUONYMUS.

Radicans—An evergreen vine; clings to walls after the manner of ivy.

HONEYSUCKLE (*Lonicera*).

Chinese Twining (*Japonica*)—A well-known vine, holding its foliage nearly all winter. Blooms in July and September and is very sweet.

Common Woodbine (*Periclymanum*)—A strong, rapid grower, with very showy flowers, red outside, buff within. June and July.

Hall's Japan (*Halleana*)—A strong, vigorous, evergreen variety, with pure white flowers, changing to yellow. Very fragrant, covered with flowers from June to November.

Japan Gold-Leaved (*Aurea Reticulata*)—A handsome variety, having foliage beautifully netted or variegated with yellow.

Monthly Fragrant (*Belgica*)—Blooms all summer. Flowers red and yellow. Very sweet.

Scarlet Trumpet (*Sempervirens*)—A strong grower and produces scarlet in-odorous flowers all summer.

Yellow Trumpet Honeysuckle (*Flava*)—A well-known native vine, with yellow trumpet flowers.

IVY.

American. (See *Ampelopsis*).

Irish Ivy (*Canariensis*, or *Hibernica*)—The well-known old sort.

STAFF TREE (*Celastrus*).

Scandens, Climbing Bitter Sweet or Wax Work.—A native climbing, or twining plant, with fine large leaves, yellow flowers, and clusters of orange-capsuled fruit. It grows 10 to 12 feet in a season.

TRUMPET VINE (*Bignonia*).

Large Flowered (*Grandiflora*)—A magnificent vine, with large yellow flowers; very showy.

Scarlet (*Radicans*)—A splendid climber, vigorous and hardy, with clusters of large trumpet-shaped scarlet flowers in August.



Honeysuckle, Hall's.

WISTARIA.

Chinese Purple (*Sinensis*)—A most beautiful climber, of rapid growth, and producing long pendulous clusters of pale blue flowers. When well established makes an enormous growth; it is very hardy, and one of the most superb vines ever introduced.

Chinese White (*Sinensis Alba*)—Introduced by Mr. Fortune, from China, and regarded as one of his greatest acquisitions. Rather tender.

Double Purple (*Flore Pleno*)—A rare and charming variety, with perfectly double flowers, deeper in color than the single, and with racemes of remarkable length. The plant is perfectly hardy, resembling the *Wistaria Sinensis* so well known as one of our best climbing plants.

Magnifica—Flowers in dense drooping racemes, of the same size as the Chinese, and of a pale lilac color; vigorous and perfectly hardy.

Evergreen Shrubs**MAHONIA (Ashberry).**

Holly-Leaved (*Aquifolia*) (D)—A most beautiful shrub, with glossy, holly-like leaves, which change to brownish green in winter, with clusters of bright yellow flowers in May; very hardy, and makes a good hedge.

Japonica (D)—Large distinct leaves, and yellow flowers in May.

RHODODENDRONS.

These are a class of plants that are looked upon by the majority of people as unreliable for general planting; one reason for this is that there has been no discrimination in the selection of varieties. Many of the kinds extensively planted in Europe are not hardy here, consequently, when the selection is taken from the catalogues of European growers there is sure to be a large percentage of failure. To obtain good effects there is no occasion for a great variety; those mentioned below will give all the most effective colors.

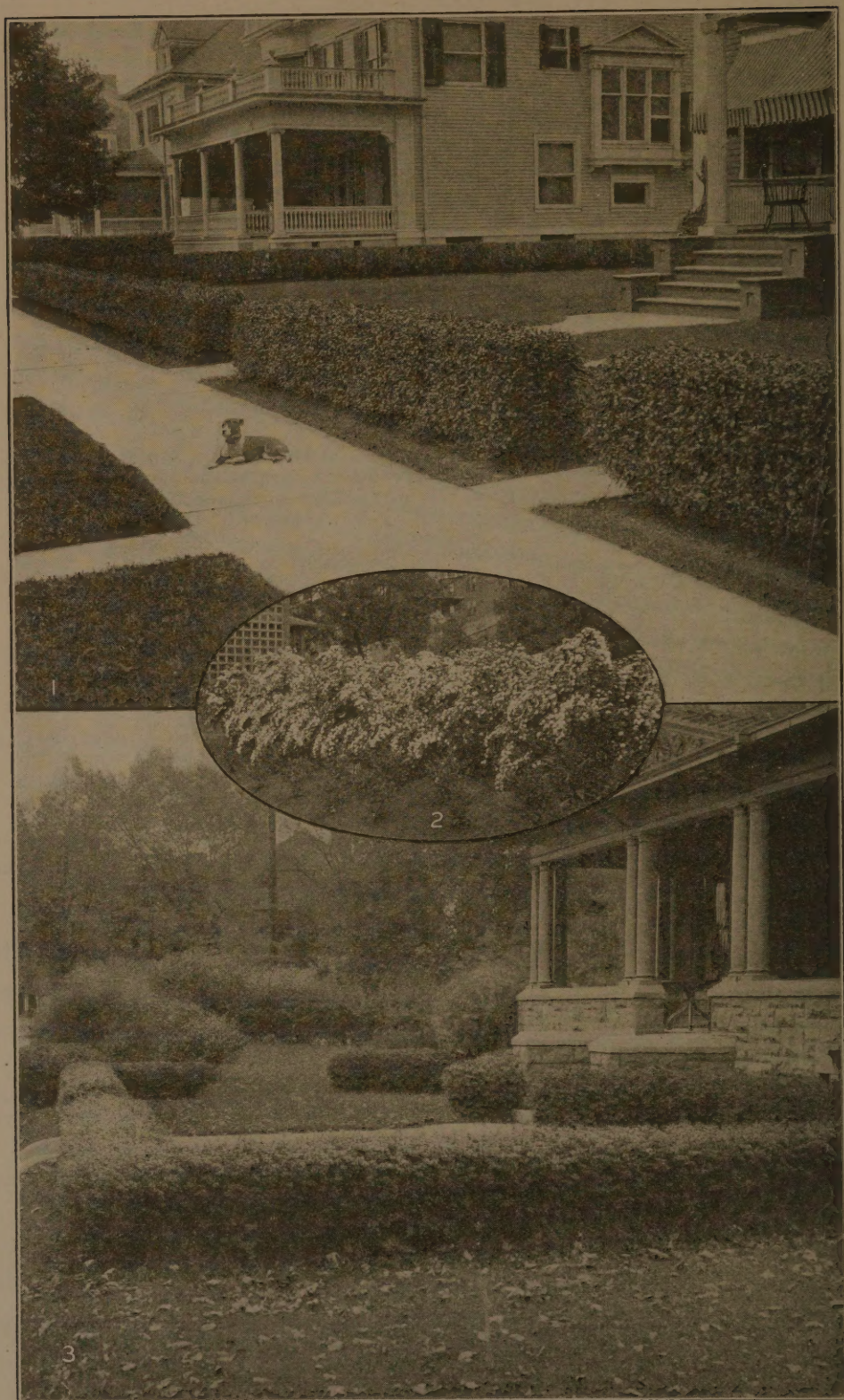
It should always be borne in mind that all the *Rhododendrons* called hardy in this climate are benefited by a covering of evergreen branches in winter, unless otherwise well protected by trees or natural surroundings, not so much to keep away the cold as to shade them from the spring sun and cutting winds, from which our native evergreens are very apt to suffer when a mild spell comes in March, followed by the intense cold; this seems to be the most critical time for all evergreens, and when the damage is done.

These *Rhododendrons* are offered in a pleasing mixture of colors, including Crimson, Rosy Crimson, Blood-red, Pink, Blush-white, White, Purple and Violet.

Hedge Plants

The idea of planting hedges for use and ornament, and screens for the protection of orchards, farms and gardens, is a practical one, and rapidly becoming appreciated. They serve not only as a protection against the fierce winds, but there is much less trouble from the blowing off of the fruit. Some writers tell us that the temperature is warmer in the vicinity of Evergreens. However this may be, we know that our gardens are earlier, and that our fruits ripen better when protected by such screens. Nothing can be more beautiful than ornamental hedges of Evergreens or Shrubs well kept and pruned to serve as boundary lines between neighbors, or as divisions between the lawn and garden, or to hide unsightly places. By using medium-sized plants a hedge can be made as cheaply as a good board fence can be built, and then, with a little care, it is becoming every year more and more "a thing of beauty." We all know that such hedges continue a principal attraction in our best-kept places.

In the present and constantly increasing scarcity of timber for fences, we must have some plant of universal adaptation for hedges. There are several which may be used, but we believe that Honey Locust combines all the required



1. English Privet Hedging. See page 91.
2. Hedge of Spiraea Van Houtte in Flower. See page 91.
3. Barberry Thunbergii Planted as a Hedge. See page 91.

qualities. It is perfectly hardy, of strong growth, and will grow in almost any soil. It also readily submits to the necessary pruning, so that it can easily be made to assume any desirable shape, and being covered with long, hard and very sharp thorns, makes a close, firm, and almost impenetrable barrier, that will turn any ordinary farm stock.

FOR ORNAMENT

The flowering shrubs are ornamental hedge plants par excellence. We give below a list of the most desirable varieties for particular purposes, but in addition to these, would mention the Japan Privet, particularly desirable on account of its handsome foliage and blossom; the Berberry *Vulgaris*, strong in growth, and particularly valuable for berry effects during the Winter months; Purple Berberry for its purple foliage, Tartarian Honeysuckles for hardiness and bloom.

Arbor Vitae American (White Cedar)—As an ornamental Evergreen hedge, there is nothing more satisfactory than this variety. It is fine in foliage and stands clipping better than any other Evergreen. Prune in Spring, just before the growth commences. Plant one foot apart.

Berberry Thunbergii—As a low hedge or border, Japan Berberry is the most desirable. It is of dwarf habit, very hardy, and not only beautiful for its foliage effects, but for the little yellow flowers which droop from the branches in the Spring, which are followed in the Fall by bright red berries, which hang on all Winter. The foliage on the new shoots is light green, and on the old shoots dark green. In the Fall, however, the whole bush turns bright crimson. This variety requires practically no trimming. Plant one foot apart.

Caragana (Siberian Pea Tree)—The best of all Shrubs for hedging purposes for the cold North-West. Prune once a year after the blossom has fallen. Plant one foot apart.

English and California Privet—Where formal effects are wanted, the Privet is the variety to plant; it stands clipping perfectly, and can be sheared three or four times a season. Plant 6 to 9 inches apart.

Spiraea Van Houtte—The best of all flowering Shrubs, nothing is more beautiful than a hedge of this Spiraea in full bloom in the Spring, being very hardy, can be planted anywhere. Requires trimming only once a year, immediately after the bloom has fallen. Plant 6 to 9 inches apart.

DEFENSIVE HEDGES

Honey Locust—For turning cattle, and as a farm hedge for general purposes, Honey Locust is the most desirable. Of vigorous growth, perfectly hardy, thrives with ordinary care, and is sufficiently thorny to be impenetrable. Will stand shearing several times during the season. Plant 6 inches apart, or if in double rows, 12 inches, rows 6 inches apart.

FOR WIND BREAKS AND SHELTER BELTS

For planting in belts to afford protection from the violent winds, concealing unsightly objects or views, we would recommend Norway Spruce, Austrian and Scotch Pine. They are robust and healthy, which are characteristics not easily obtained in Evergreens. For the Canadian North-West and Prairie Country, where trees must be absolutely hardy, Manitoba Maples, Russian and Volga Poplars, Laurel Leaf and Russian Willows make valuable wind breaks, besides providing valuable timber for fuel and fencing.



1. H. P. Rose, Mad. Plantier. See page 95.
2. H. P. Rose, Frau Karl Druschki. See page 94.
3. Everblooming Rose, Liberty. See page 103.

Rose Department

HYBRID PERPETUAL, OR REMONTANT ROSES.

These are divided into two classes, known as Hybrid Remontants, or hardy roses, and the more tender varieties called Monthly Roses. The latter are not quite as large or attractive in appearance as Remontants, but they bloom more freely, many of them starting to flower early in June, and continuing until late in the fall.

The Hybrid Remontants and Monthly Roses are for outside culture, as they thrive best in the open air, and require no winter protection. In order to grow them successfully an open spot should be selected, where they will get plenty of light. If the soil is poor, remove it to the depth of a foot or eighteen inches, and replace it with a mixture made of three parts loamy soil and one part manure—**thoroughly mixed**. If the soil is good a little manure well worked in will prove of benefit. The fall is probably the better time to plant Hybrid Roses; they should be set deep, and a covering given them of autumn leaves to the depth of six inches to a foot. A few evergreen boughs will hold these in place. In the spring the leaves will be considerably beaten down with rain and snow; dig them into the ground and cut back the roses to within three or four inches of the ground, and with the new growth you will have a magnificent display.

The Queen of Flowers should be planted more extensively in all districts. The city and town is not the only locality where the Rose should find a place. At a very little outlay, the lawn in front of the farm house can be greatly embellished by the artistic arrangement of a bed of roses.

Alfred Colomb—Brilliant carmine crimson; very large, full, of fine globular form, and extremely fragrant.

American Beauty—Large, globular; deep pink, shaded with carmine; delicious odor; has proved to be a most desirable variety for forcing, and may be found valuable for cultivation out of doors.

Anne de Diesbach—One of the best and most satisfactory Hybrid Perpetual Roses. A strong, vigorous grower, extremely hardy; producing very large, double flowers, of a lovely shade of carmine, and delightfully fragrant.

Baron de Bonstetten—Rich, velvety maroon; large, full. A splendid sort.

Baronne de Maynard—Pure white; medium-sized flowers, good form, very double, and one of the most persistent of bloomers.

Baroness Rothschild—Light pink, cupped form; very symmetrical; without fragrance. Very distinct and beautiful; one of the finest exhibition varieties. The wood is short jointed, very hardy, and a late bloomer.

Captain Hayward—Flowers very large; color bright carmine crimson; vigorous and free-flowering.

Clio—One of the finest flesh-color H.P. Roses. The flowers are simply perfect in form, with fine broad petals, and beautiful at all stages of development, from the small bud to the full open flower. Color delicate satin blush, shaded to rosy pink in centre. Very free bloomer and strong healthy grower.

Coronation—Shading from flesh to bright shrimp, largest rose grown.

Countess of Oxford—A seedling from Victor Verdier. Bright carmine, fading in the sun; very large and full, not fragrant; wood almost thornless; foliage very handsome, large and distinct. Fine in the bud; valuable for forcing.

Coquette des Alpes—White, slightly shaded with carmine; form semi-cupped; wood long jointed; larger flowers than the others. The strongest grower of the entire class.

- Coquette des Blanches**—Pure white, sometimes faintly tinged with pink; flowers of medium size, somewhat flat, but full and very pretty; growth more bushy and symmetrical than any of the others. One of the hardiest. Later than the rest in coming into flower, but continuing to produce immense quantities of beautiful white roses in large clusters throughout the season, until frost appears.
- Duchess of Albany**—Like *La France*, but larger, deeper in color and more expanded; very fragrant.
- Eugenie Verdier**—Raised from Victor Verdier. Beautiful silvery pink, tinged with fawn; large, full, finely formed; exquisite buds; large lustrous foliage; forces well. One of the most beautiful roses of the Victor Verdier type.
- Fisher Holmes**—Deep, glowing crimson; large, moderately full, and of fine imbricated form. A superb rose.
- Francois Levet**—Cherry red; medium size; well formed; of the Paul Verdier style; very fine bloomer. Valuable on account of its vigorous habit.
- Francois Michelon**—A seedling from *La Reine*. Deep carmine rose; very large, full and of fine, globular form; fragrant and a free bloomer. Habit very erect. A distinct, choice sort; excellent late in June and July, when other varieties are gone, and also in the autumn.
- Frau Karl Druschki (Snow Queen)**—A continuous blooming, hardy variety; beautiful in bud and when fully developed. Flowers are large, beautiful, pure silvery white with a very deep bud. This is the best white Hybrid Perpetual yet introduced and one of the best novelties of recent years. We thoroughly recommend it.
- General Jacqueminot**—Brilliant crimson, large and very fine; one of the handsomest and most showy roses of this color. Beautiful in the bud; semi-double when full blown. Of fine free growth; a universal favorite.
- Gloire de Chedane Guinoisseau**—Bright vermilion-red, large and double.
- Gloire de Margottin**—New. This is the brightest-colored rose yet introduced, and is in every way a most desirable variety, being a good, strong, vigorous grower, and free bloomer; good for either forcing or outdoor culture.
- Harrison's Yellow**—Golden yellow, medium size, semi-double; a freer bloomer than Persian Yellow.
- Hugh Dickson**—Intense crimson, shaded scarlet; very large, full, and magnificent form, with high pointed centre; growth upright and vigorous, free and continuous bloomer; the finest of all Autumn roses, very highly perfumed. Awarded the Gold Medal of the National Rose Society of England. Finest rose of its color.
- John Hopper**—A seedling from Jules Margottin, fertilized by Mme. Vidot. Bright rose, with carmine centre; large and full; light red thorns, not numerous. A profuse bloomer and standard sort.
- Jubilee**—This is a true Hybrid Remontant Rose; perfectly hardy; flowering in fall as well as in early summer; flower very large, reaching 6 inches across under good cultivation. Outer petals partially reflexed and recurved; centre petals upright and very gracefully disposed, giving grace and finish, without showing centre. They last a long time when cut; the fragrance is strong, delightfully rich, and very lasting. Deep red in color, shaded to deep crimson red, and velvety maroon red in the depth of the petals.
- La France**—Delicate silvery rose; very large and full; an almost constant bloomer; equal in delicacy to a tea rose; the most pleasing fragrance of all roses; only a moderate grower, but most desirable.
- La Reine**—Brilliant glossy rose; very large; cupped and beautiful; a very hardy, useful rose.
- Madame Charles Wood**—A true perpetual bloomer. Begins to bloom almost as soon as planted, and continues throughout the season. The flowers are extra large, very double and full, and quite fragrant. Color a bright, fiery scarlet, passing to fine rosy crimson, elegantly shaded with maroon. Very showy and handsome, and one of the best roses ever introduced for general planting.

- Mad. Gabriel Luizet**—For loveliness in color, fragrance, size and freedom of blooming qualities, this rose has no equal to-day; equally good as a bedding rose outdoors. Pink, distinct, very large, cupped shaped; somewhat fragrant. As an exhibition rose, will rank with its rival, Baroness Rothschild.
- Madame Plantier**—Pure white; medium size, full; flowers produced in great abundance early in the season.
- Magna Charta**—Bright pink, suffused with carmine; very large, full and fragrant, with magnificent foliage. A free bloomer. For the earliest deep color is still the best.
- Margaret Dickson**—White, with pale flesh centre; extra large flower, of fine substance; vigorous grower.
- Marshall P. Wilder**—Raised from the seed of Gen. Jacqueminot. It is of vigorous growth, with healthy foliage; flowers large, semi-globular; full, well formed; color cherry carmine. In wood, foliage and form of flower, it resembles Alfred Colomb.
- Mrs. J. Sharman Crawford**—Beautiful, large pink; very free flowering.
- Mrs. John Laing**—New—As a bedding rose this is undoubtedly one of the best varieties yet introduced, being hardly ever out of bloom all summer. Color a beautiful shade of delicate pink; of large size and very fragrant. It is also a good forcer from January onwards.
- Pæonia**—Red; large or very large; fragrant, and a free bloomer. A good garden variety.
- Paul Neyron**—This magnificent rose should be in every collection. By far the largest variety in cultivation. The flowers are of an immense size, many of them being 5 to 6 inches in diameter, very double and full, of a beautiful deep rose color, and delightfully fragrant; borne upon vigorous upright shoots in great abundance throughout the entire season. As showy as the Pæonia, it has the delicate coloring and exquisite scent of the rose. The wood is nearly smooth and foliage tough and enduring. We recommend this variety very highly for general planting, as it is calculated to give more satisfaction to the masses than any other known variety.
- Persian Yellow**—Deep, bright yellow; small but handsome; double; a very early bloomer, and much the finest yellow rose.
- Prince Camille de Rohan**—Deep velvety crimson; large, moderately full. One of the darkest in cultivation, and a splendid rose.
- Soleil d'Or, or Golden Sun**—This magnificent new rose is perfectly hardy; its growth is vigorous, making plants 3 feet high; foliage ample and close, a beautiful clear green. Flower large, full, globular, measuring $3\frac{1}{2}$ inches across, and deliciously fragrant. Color superb, varying from gold and orange yellow to reddish gold, shaded with nasturtium red. Buds pointed and beautifully formed. A grand rose, destined to be immensely popular. No one can afford to be without it.
- Ulrich Brunner**—A superb rose; a seedling from Paul Neyron; extra large, bold flowers; full and globular; petals large and of good substance; color rich, glowing crimson, elegantly lighted with scarlet; fragrant.
- Victor Verdier**—Fine, bright rose, shaded with carmine; very hardy and a fine bloomer; a splendid rose.

RAMBLER AND CLIMBING ROSES.

- American Pillar**—Large single flowers of rich rosy-pink approaching brilliant carmine, just a glint of white at centre and golden yellow stamens, a profusion of bloom almost covering the foliage. Grows thick, vigorous canes and broad dark green leaflets, tough, shining and insect-proof. A new and valuable climber originated by the U.S. Government Department of Plant Introduction.
- Baltimore Belle**—Pale blush, nearly white; double; the best white climbing rose.
- Blue or Violet Blue Rambler (Veilchenblau)**—A sport from Crimson Rambler and as vigorous a climber; produces immense panicles of blooms, opening reddish lilac, changing to amethyst and steel blue. A novelty of recent introduction, the nearest approach to a blue rose.



American Pillar Rose. See page 95.

Crimson Rambler—This remarkable rose was originally received from Japan. The plant is of very vigorous growth, making shoots from eight to ten feet in height during a season, and is consequently a most desirable climbing variety; and when pegged down or grown as a bush, a marvelous head of bloom is the result. It is also exceedingly hardy, having successfully withstood the test in exposed situations of very severe winters in this country. As a pot plant it is unequalled for decorative purposes. The bright green glossy foliage with which the plant is covered very early in the spring, forms a pleasing and striking contrast to the flowers which are produced in large tresses of pyramidal form, and of the brightest crimson color, the blooms remaining on the plant for a great length of time without falling or losing their brightness. The foliage is also retained to a great extent during the winter, making the plant almost an evergreen. Gold medals from the National Rose Society, the National Horticultural Society of France, and

the Earl's Court Exhibition, as well as numerous first-class certificates have been awarded to this rose.

Dorothy Perkins—This splendid, new, shell pink, climbing rose attracted much attention at the Pan-American Exposition, when a bed of fourteen months' old plants produced a show of bloom unequalled by any other variety, unless it was the famous Crimson Rambler. This new rose is of the same strong habit of growth as the Crimson Rambler; the flowers are borne in clusters of thirty and forty, sometimes even fifty and sixty. The flowers are large for a rose of this class; very double, sweetly scented, and of a beautiful shell pink, a color that it is almost impossible to accurately describe.

Excelsa (Red Dorothy Perkins)—Intense crimson-scarlet; double flowers in brilliant clusters set in glossy, shining foliage which never mildews nor spots. An intensified Crimson Rambler, which it promises to displace. Extremely vigorous and the handsomest of all red climbers.

Flower of Fairfield (Everblooming Crimson Rambler)—Brilliant crimson, base of petals white; flowers perpetually and profusely in brilliant clusters from early summer until frost.

Gem of the Prairie—Carmine crimson, occasionally blotched with white; a cross hybrid between Madame Laffay and Queen of the Prairie.

Helene—Strong, rapid grower, throwing up canes 10 to 12 feet high, and making well formed bushes in a single season. In growth and habit, it is similar to the "Crimson Rambler," but the foliage is better, and it is almost thornless. It is very hardy, and needs no protection unless very far north. The flowers are larger and more double than the "Crimson Rambler," borne in magnificent clusters, entirely covering the bushes from top to bottom for weeks at a time. The color is a soft, velvet crimson, much darker and an entirely different shade from the "Crimson Rambler."

Hiawatha—Glowing ruby-crimson, with a clear white eye; single flowers in clusters; light glossy green foliage; a seedling from Crimson Rambler; excellent for climbing, trailing or forcing.

Lady Gay—Cherry-pink, fading to soft white; the flowers, in large, loose trusses, together with the buds and foliage, form a mass of beauty from base of vine to tips of branches; a perfectly hardy climber.



1. Dwarf Polyantha Rose, Baby Dorothy. See page 99.
2. Rosa Rugosa. See page 104. 3. Climbing Rose, Lady Gay. See page 96.

- Philadelphia Rambler**—An improvement on the famous Crimson Rambler, flowers being larger, much more double, and of a light crimson color.
- Pink Rambler**—One of the very newest roses on the market to-day. It is a seedling from *Rosa Polyantha Sarmentosa*, crossed with *Mignonette*; color a clear bright red, with numerous golden anthers. Pink Rambler, like all the other Ramblers, is a very profuse bloomer, and a vigorous grower. It is similar in nearly every respect to the Yellow Rambler, except in the color of the bloom.
- Queen of the Prairie**—Bright rosy red, frequently striped with white; large, compact and globular.
- Thousand Beauties**—Varying shades from a delicately flushed white to a deep pink or rosy carmine, in bright clusters of blossoms almost covering the handsome pale green foliage. A vigorous hardy climber with few thorns.
- White Dorothy Perkins**—A pure white sport from Dorothy Perkins with which it is identical in foliage and habit. A valuable addition to the hardy climber class.
- White Rambler**—Since all the Rambler Roses are similar in habit of growth, foliage and manner in which they throw their bloom, no great difference between them can be noted, save in the color of bloom. To thoroughly appreciate their respective merits they should be planted en masse. The White Rambler is a seedling from *Rosa Polyantha Sarmentosa*, crossed with *Paquerette*. Pure white.
- Yellow Rambler**—Seedling from *Rosa Polyantha Sarmentosa*, crossed with *Reve d'Or*. This variety will probably be the most popular of the four, since it is the first and only Yellow Climbing Rose which has any appreciable degree of hardiness. Yellow Rambler has withstood, unprotected, and without injury, a continued temperature of ten degrees below zero, and with slight protection in winter it will do anywhere that other roses succeed. It is therefore a great acquisition to our northern gardens. The color is a clear, decided yellow. The blossoms are of moderate size, and last three or four weeks without fading, and are frequently borne in clusters of from 120 to 150 flowers.

DWARF POLYANTHA ROSES.

Ideal Bedding Roses. Admirably suited for Bouquets and Boutonnieres.

This is a novel, distinct and charming class of Roses. The plant is of dwarf habit and bears abundantly and continuously clusters of dainty, small flowers, of perfect form and of various shades of color. While they are admirably suited to cut for bouquets and boutonnieres, they are ideal bedding roses, and supply a long-felt want among Rose Culturists for that purpose. To obtain the best results they should be planted in beds or masses, 25, 50 to 100 plants together, thus insuring a very effective group. Crimson Baby Rambler has proved to be one of the best bedders and the new varieties *Anny Müller*, rose color, and *Maman Levavasseur*, pink, will be greatly prized when known. These important and valuable additions should give a new impetus to Rose culture.

Anny Muller (New Rose-colored Baby Rambler)—Large clusters of brilliant rose-colored flowers in great profusion. A splendid bedding variety.

Baby Rambler—The world's greatest rose. This great novelty originated at New Orleans, France, and is a hybrid produced by the crossing of *Crimson Rambler* and *Gloire des Polyanthus*. It preserves the prolific flowering quality of the latter, but with the color of the *Crimson Rambler* (clear brilliant ruby rose).

The foliage is of a fine polished dark green and is never attacked by insects or fungus. It blooms in clusters and is very continuous. The time of blooming of the first umbel is not ended when the adjacent branches are ready to open with a considerable number of flowers, so that the period of blooming is not interrupted until after severe frosts. This rose will be very popular on account of its cluster formation being similar to that of the *Crimson Rambler*, and more particularly because it is covered with flowers the whole summer. 120 individual flowers have been counted on a single panicle. It will be especially valuable for culture in pots.

The winter of 1903-1904 was the most severe experienced in many years. The plants stood out in our nurseries here, during all that winter, without any protection whatever. We have no hesitation in saying that the bushes of Dwarf Perpetual Crimson Rambler are perfectly hardy and vigorous. The plants grow 24 to 30 inches high; it is not a climber.

Catherine Zeimet (White Baby Rambler)—Pure snow-white double blooms in profuse clusters, making a sheet of white color, with a fragrance similar to Hyacinths. A compact, bushy grower of dwarf habit; foliage dark, glossy and finely cut; ever-blooming and hardy.

Jessie—Bright, cherry-crimson, likened unto Richmond in color and non-fading; claimed to excel all red Baby Ramblers in beauty of color. Splendid for pot culture, bedding and massing; blooms constantly until frost.

Maman Levvasseur (Baby Dorothy) (New Pink Baby Rambler)—This latest introduction of the well-known raisers of the now famous Crimson Baby Rambler (Mme. Norbert Levvasseur) is similar in all respects to that variety except that the flowers are of a clear brilliant pink and very freely produced. We believe that this new Rose will become extremely popular for bedding purposes and for pot plants as soon as known.

Mrs. Cutbush ("Phyllis")—Pretty, bright, carmine-pink; very bushy and of branching habit, producing long feathery panicles of flowers from June until frost. A novel Rose, ideal for bedding and massing and without an equal for decorative use in pots.

Orleans—Brilliant geranium-red, suffused rose and deep cerise. Bushy habit, grows and blooms freely; florets not crowded but of beautiful arrangement and most lasting quality with their stiff, paperlike texture. The showiest and prettiest of the pink "Baby" class. Awarded gold medal.

Paquerette—Pure white, flowering in clusters of from five to fifty blooms; very full and prettily formed.

Pink Soupret—Medium size, very double and beautifully imbricated like an aster, produced in clusters; color, bright, clear pink; valuable for florists for designs, or as a market pot plant, being a remarkable free and constant bloomer of easy culture.

MOSS ROSES.

Blanche Moreau—This fine variety is highly recommended; flowers are produced in clusters, and are large, full and sweet; the color is pure white: both flowers and buds have an abundance of lovely, deep green moss.

Crested—Deep pink buds, surrounded with mossy fringe and crest. Very beautiful and fragrant; growth slender.

Henry Martin—Rich, glossy pink, deepening to crimson; large, globular flower; very full and sweet; finely mossed.

John Cranston—Deep crimson; very double.

Perpetual White—Pure white; bloom in large clusters.

Princess Adelaide—A vigorous grower; pale rose; of medium size and good form; good in bud and flower. One of the best.

Salet—A vigorous grower and perpetual bloomer. Light rose; large, full. The best of the class. A true perpetual moss, blooming at intervals from June to November.

PERPETUAL TENDER ROSES.

Under this head we include all classes of Tender Roses—Bourbon, China, Hybrid Tea, Noisette and Tea, and indicate the class to which each variety belongs with the letters B, C, H T, N or T, respectively. The perfume of these roses is most delicate and agreeable; indeed they may be called the sweetest of all roses. The flowers are also very large and delicate in their colors, such as white, straw and flesh color, and various tints of rose combined with them. They are more tender than any other roses in the catalogue, requiring a house or pit in winter. They are most desirable for house culture in pots.

In the spring, immediately after all danger of hard frost is past, they may be transplanted into the open ground, and remain until freezing weather commences again in the autumn. During the summer, and more especially in the fall, they will bloom most abundantly, and afford increasing satisfaction and delight.

- Agrippina** (C)—Red, velvety crimson; moderately double; fine in buds; valuable for planting out. One of the best.
- Bon Silene** (T)—Rosy carmine, shaded with salmon; fragrant and very free flowering. Valuable for the buds.
- Catharine Mermet** (T)—Bright flesh color, with the same peculiar lustre possessed by *La France*. Large, full and beautiful. One of the finest Teas.
- Duchesse de Brabant** (T)—Light carmine, tinged with violet.
- Etoile de France** (Star of France) (H.T.)—A brilliant shade of clear red-crimson velvet, centering to vivid cerise; large flowers on long, stiff stems; remarkably vigorous, free-blooming and hardy. Grown to some extent as a cut flower variety, but its chief value lies in its striking beauty as an outdoor bloomer and bedder with bronzy-green foliage.
- Gloire de Dijon** (T) (Climber)—A combination of salmon, orange and buff; flower large, and of good globular form; hardy.
- Hermosa** (H.T.)—Bright rose; a most constant bloomer; hardy; one of the best.
- L'Innocence** (T)—This great rose is called the White Madame Caroline Testout. It is a strong symmetrical grower, quite free from thorns, foliage large and leathery; flowers large, full, deep and double, globular in form. Color bright snowy white. The petals are thick, shell-like and very large. The flowers are borne with great freedom upon long stems. It is a superb variety.
- Mme. Bravy** (T)—Creamy white; large, full; of very symmetrical form and delicate fragrance. A superb Tea.
- Maman Cochet** (T)—The growth is free and vigorous, very free blooming; flowers of splendid substance, and delightful shade of deep pink. The buds are long and pointed, full and firm, lasting a long time when cut.
- Marechal Niel** (N)—Deep yellow; very large; very full, globular; highly scented. Requires careful treatment. It should be severely pruned. The finest yellow rose.
- Meteor** (H.T.)—As a dark crimson perpetual blooming rose this ranks as one of the best yet introduced of any class. It is especially valuable for summer and fall blooming, either in the greenhouse or in open ground, and where there is a demand for fine roses in summer this variety will become a great favorite.
- Mrs. W. J. Grant** (H.T.)—Bright, rosy pink; large, full and beautifully formed; very sweet. A grand rose.
- Papa Gontier** (T)—Rose, shaded yellow; reverse of petals crimson; large, semi-double, fragrant, free growing, profuse flowers. Very popular for winter forcing.
- Perle des Jardins** (T)—A beautiful straw color, sometimes deep canary; very large, full, and of fine form; stiff shoots or stems, and very free flowering. Now established as the most popular yellow rose for forcing.
- Souvenir du Pres. Carnot** (H.T.)—Delicate flesh, shading a trifle deeper in centre.
- Souvenir of Wootton** (T)—A red hybrid Tea, from seed of *Bon Silene*, fertilized with *Louis Van Houtte*; plant vigorous, with fine foliage; free blooming; buds of good size, on strong shoots; of a rich color and extremely fragrant.
- Sunset** (T)—A sport from *Perle des Jardins*. Identical in every respect with that variety, except that its color, instead of being a canary yellow, is of a rich, fawny shade of saffron and orange, similar to, but deeper, than *Safrano*. In size, vigor and productiveness, it is in all respects the same as the variety from which it sprung.
- The Bride** (T)—A lovely pure white Tea Rose, of large size. Admirable for forcing as well as for summer flowering. The buds have more substance than *Niphetos*, are full and double, and possess the good characteristics of *Cath. Mermet*.
- William Allen Richardson** (H.T.)—Deep orange-yellow, with centre of copery-yellow, faintly tinted with rose; beautifully colored and formed,

White Maman Cochet (T)—What has been so long desired, viz., a pure white ever-blooming rose, has been obtained in this grand variety. It has all the requisites of a perfect garden rose—substance, size, fragrance, hardiness, vigor and profusion of bloom, rivalling the best of the monthly ever-bearing roses in the matter of quality. It is a "Sport" from the well-known and much valued rose, "Maman Cochet," inheriting all its fine qualities, full and firm buds, long and pointed, the ideal shape for a rose, keeping a long time when cut.

Hardy Ever-blooming Roses

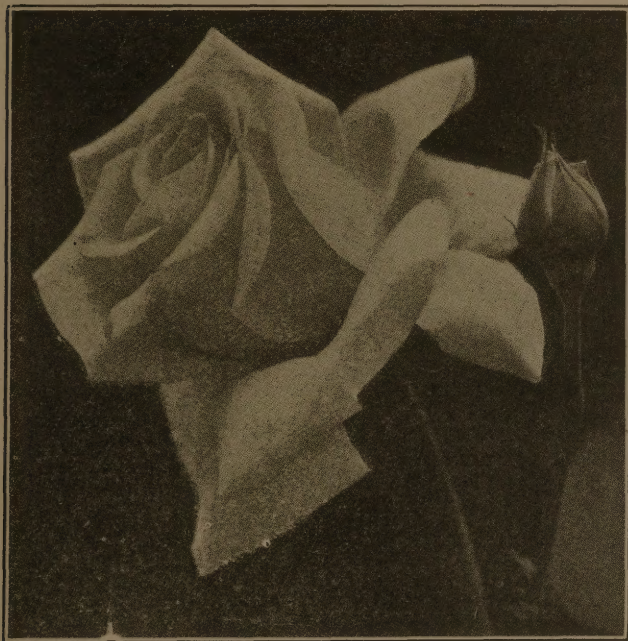
HYBRID TEAS.

A new race of Roses has developed within recent years known as the Hybrid Teas, and which are speedily growing into favor. Many growers are dissatisfied with the Hybrid Perpetual Roses, as they have only one season to bloom. A class, however, that will survive our winters and bloom freely all summer is deservedly popular.

To lovers of Roses, therefore, we offer these choice varieties, the best in regard to hardiness and bloom for amateur gardeners. They require some winter protection, but where this extra attention is given, they will repay one hundred fold by a succession of bloom throughout the growing season in the most delicate of colors, sweet scented, and with buds of finest form.

THE ADVANTAGE OF PLANTING FIELD-GROWN DORMANT PLANTS.

Many have tried these Hybrid Tea Roses and have failed, through planting small greenhouse plants, not sufficiently hardened and with little root system. The plants we offer have been field-grown, are two years old, and will be delivered in a dormant condition, the right condition to plant, and the best stock that can be supplied.



Bessie Brown Rose See page 102.

Winter Protection.

The best method of winter protection for these Roses is, in the fall to bank the earth well around the roots and crown of the bushes, and then cover the branches with a covering of forest leaves or straw. A neat and effective way is to surround the beds with a temporary fence of 12-inch chicken fence wire, filled with leaves, which are easily obtained. Evergreen boughs make a fair covering, but are difficult to obtain in quantity. Corn stalks are frequently used. Leaves, however, answer the purpose admirably, and a better or more natural covering it is difficult to get.

Antoine Rivoire—An ideal bedding rose of large size, exquisite form and coloring, which is soft peach-flesh with deeper shadings; the base of the petals yellow.

Bessie Brown—A strong vigorous grower, flowering in fragrant profusion; flowers of perfect form, large size, and highly fragrant; color, creamy-white.

Betty—Early in the season this is a disappointment in the first flowers when it opens, but after it becomes established it produces blooms of marvelous beauty. The plant is a strong vigorous grower, producing in great profusion its large deliciously scented flowers, which are of a glowing coppery-rose color, suffused with a golden sheen.

Colonel R. S. Williamson—Satin, white, with deep blush centre; a large full flower of perfect form; petals round, smooth, and of good substance; a grand rose in every way.

Countess of Gosford—New, of splendid growth, free and upright; foliage, pretty. One of the very high grade roses in our nursery and pleases us immensely. Produces in profusion perfect bloom, extremely pretty buds; not extra full, but delightfully graceful and always opens nicely. Color clear salmon-pink with base of petals saffron-yellow.

Dean Hole—Silvery Carmine with salmon shadings, large, full and of fine form; a variety of great excellence.

Dorothy Page Roberts—Coppery-pink, suffused with apricot-yellow, more especially at the base of the petals which are very large, massive and of great substance. An ideal garden rose of wonderful charm and fascination.



General McArthur Rose.

Earl of Warwick—Soft salmon pink, centre shaded vermillion; a large full flower of beautiful form; fine decorative variety.

Empress Augusta Victoria... A beautiful rose, with elegant, large pointed buds; very large, full, double flowers. Color deep creamy white; deliciously fragrant. Plant a strong, healthy grower and constant bloomer.

General McArthur—Vivid crimson scarlet, the most beautiful shade of any garden or forcing rose offered, retaining its brilliancy when expanded to flowers of superb form, larger than Liberty or Meteor; free from mildew.

Gruss Au Teplitz—Hardy in all sections, grows freely to a height of four to five

feet, vivid, dazzling, fiery crimson; sweetly fragrant; produces a mass of gorgeous blooms on long stems.

Joseph Hill—A perfect gem, of strong, clean, vigorous growth, remarkably free-flowering; in color a lively shade of salmon-pink; the perfect flowers are large, full and double.

Killarney — Is one of the most popular of our garden roses, and also one of the leading varieties for winter-cut flowers. It is perfectly hardy; in growth it is strong and robust, and as free-flowering as any rose we know. In color is a sparkling brilliant pink, the blooms are large, and the buds long and pointed, the petals very large and of great substance, and just as handsome in the full-bloom as in the bud form.

Laurent Carle — Produces its large, deliciously scented, brilliant carmine, perfect flowers throughout the season, nearly as good in hot dry weather as under more favorable weather conditions. The plant is a vigorous grower, and is hardy as a Hybrid Perpetual.



Killarney Rose.

Liberty — The color is magnificent, rich, fiery, ruby, with deep crimson tone in the depths of the flowers. The petals are covered with a rich, velvety bloom, like those of the "Jubilee" rose. The fragrance is delightful, all-pervading and refreshing, which in itself would suffice to give this variety a high place among roses—one of our best new, hardy, ever-blooming roses.

Lyon — Neither words nor artist's brush can do justice to the wonderful coloring of this rose: it must be seen to be appreciated; the buds are long tipped coral-red and chrome-yellow at the base. The flowers when expanded are large and full, with broad petals of superb color being a coral-red or salmon-pink, shaded with chrome-yellow in the centre, toning to a shrimp-pink at the tips.

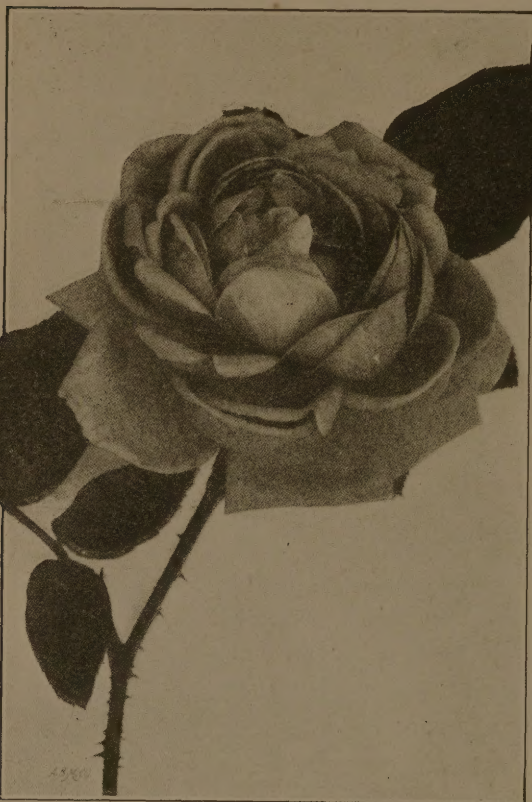
Mrs. Theodore Roosevelt — Creamy white, with rose centre; a large well formed, full bloom, vigorous and free, a grand rose.

Madam Ravary — Should be in every collection on account of its distinct color which is of rich deep nankeen-yellow, becoming lighter as the flower expands. The flowers are of splendid form, full, double and very fragrant.

Mrs. Aaron Ward — Few roses attract as much attention as this beautiful French introduction, which in color is a distinct shade of Indian yellow, which as the flower expands shades lighter towards the edges, making a splendid color combination, which is more decided in dry than in wet weather, one of the freest flowering varieties in our collection.

Mdm. Segond Weber — A grand rose in every way. It is a vigorous grower, free flowering, large, perfectly formed, cup shaped; fragrant flowers of marvellous beauty in color, it is of that soft shade of salmon-pink which appeals to everyone.

Madam Abel Chatenay—Bright carmine rose, shaded to deep salmon; long, pointed full sized flowers, continuous and vigorous.



Lyon Rose. See page 103.

Madame Caroline Testout—

This truly valuable rose is a counterpart of La France, but is deeper and more brilliant in color. It seems equally as healthy, and is certainly more vigorous in growth, which is a great recommendation. The petals are large and of elegant La France form, exquisitely edged and bordered with clear silver rose. Both flowers and buds are extra large, and of very elegant form; the color is brilliant satiny rose, deepening at centre to clear red. It is hardier than La France, and is highly fragrant.

Mrs. David Jardine—Bright rosy pink, passing to salmon pink in the outer petals, of large size and perfect form, vigorous, erect habit and free bloomer, a grand rose in every way.

Richmond—One of the most beautiful Hybrid Teas grown; very dark red; highly perfumed; bud long and beautifully formed.

William Shean—Pure pink in color, well shaped petals of good substance; 4 inches long, a glorious rose of immense size, and erect form and substance.

RUGOSA ROSES.

(*Rosa rugosa*).

This is a very interesting group, of Japanese origin. The flowers are mostly single. The plant is highly ornamental on account of its good habit and beautiful glossy foliage.

Blanc Double de Coubert—A splendid double pure white.

Conrad Ferdinand Meyer—Pure, silvery pink, surpassing all others of the Rugosa family in beauty of color and fullness of form; fragrant and hardy; will not mildew nor black-spot; handsome in foliage and valuable as an ornamental shrub.

Mde. Chas. Worth—The handsomest foliage Rose in cultivation. A dark Red Rose, very double, handsome both in bud and expanded flower. A hybrid of the Rugosa class combining the fine leathery, glossy foliage of the Rugosa with the flower and aroma of the Hybrid Perpetual. A prolific bloomer.

Madame G. Bruant—One of the first of a new race of hybrids. In the bud state the flowers are long and pointed, when open, semi-double; pure white and fragrant, and produced freely in clusters at intervals throughout the summer; exceptionally hardy and vigorous; forms a handsome bush. Budded plants.

Nova Zembla—A hybrid variety in which the foliage is entirely distinct from the type, forms large shrub-like bushes 6 feet or more high, making it a most desirable variety to plant in a shrubbery border; the flowers are large, double, of fine form, white, with a pleasing flush of pink, and produced throughout the summer.

Rugosa alba—A species from Japan. Single, pure white flowers of five petals; highly scented; a splendid shrub.

Rugosa rubra—Another Japan variety. Flowers single, of a most beautiful bright rosy crimson, succeeded by large berries of a rich rosy red color, and are a great addition to the ornamental character of the plant. Makes a beautiful low hedge.

NEW EVERGREEN ROSES.

The growth of these plants is remarkable for its freedom, a single specimen four years old covering a space of 240 square feet, with shoots twelve to twenty-five feet in length, completely covering the ground with its bright glossy foliage and showy fragrant flowers. The same plant is making thirty-eight new growths of great strength. The foliage of all is leathery in texture, glossy, and not only proof against insects, but evergreen. The large, fragrant flowers are produced very freely, and they are extremely useful for cutting purposes, especially when in bud. For trailing or covering ground where nothing else will grow, to cover roots, stumps and stems of trees, walls and trellises, and for forcing as pot plants during spring, especially for Easter, the following varieties will be found valuable:—

Evergreen Gem—*Wichuriana* × *Mme. Hoste*—Not only evergreen, but growing during mild weather in winter. Stems long, branching, rich bronze color, covering the ground closely. Foliage fine rich bronze color, closely matted. Flowers produced singly on stems, yellow, buff in bud, opening to almost white, two or three inches in diameter, perfectly double, with delightful sweet briar fragrance. This will be found most valuable for landscape work as well as for cutting.

Jersey Beauty—*Wichuriana* × *Perles Des Jardins*—Extremely vigorous grower, foliage glossy, and of thick, leathery substance. Flowers large, single, three inches in diameter, opening pale yellow, with cluster of bright yellow stamens, very fragrant, and produced in greatest profusion, covering the plant entirely, and having the appearance of a yellow Cherokee rose. Great acquisition, and the most striking variety of the set.

Memorial Rose—This is another of the evergreen trailing roses, producing an abundance of white flowers. It is fairly hardy, and for cemetery purposes has no equal.

TREE ROSES.

These roses are budded or top-grafted upon strong-growing stocks, about three feet from the ground. We offer them in all colors. A specialty with us in this class is the Weeping Tree-Rose; also the Ramblers in tree form.

NEW HYBRID SWEET BRIAR ROSES.

The new sweet briars are hybrids obtained by the Right Hon. Lord Penzance between the common sweet briar and various old-fashioned garden roses, and are possessed of the following advantages:—

The foliage of every one of them is as sweetly scented as the common sweet briar.

The flowers which are borne in wondrous profusion, are varied in color from white to very dark red or crimson.

The plants are perfectly hardy, even in open and exposed sections, and surpass in this desirable quality the common hedge briar.

For vigor of growth there is nothing in the rose world to equal them. A plant three years old will throw out shoots that reach a height of eight or ten feet.

The flowers are single or semi-double.

After the flowers are over they are followed by bright scarlet seed pods. These form a pleasing contrast to the dark green scented foliage, and make the plant very ornamental till late in the autumn.

These sweet briars require no pruning, except to remove some unsightly branch.

It is well to stake each plant, so that one or two of the principal shoots may be tied to it to prevent the plant being blown over by heavy winds.

These are certainly a desirable acquisition to our list of roses, and we highly recommend them for all sections.

Annie of Geirstein—Dark crimson.

Lady Penzance—Soft tint of copper.

Flora McIvor—Pure white.

Lord Penzance—Soft shade of fawn.

FOR THE ROSES.

A noted rose grower, in his treatise, "The Rose," says:—"He who would have beautiful roses in his garden, must have beautiful roses in his heart. The application of certain remedies, therefore, is not all that is required; you must be vigilant and watch your roses carefully if you want them healthy."

Aphis—This is a small green louse, when fully grown about an eighth of an inch in length. If your roses are troubled with ants, watch for the Aphis. A simple remedy is to smoke your plants with tobacco. The following formula will prove beneficial:—Quassia, or tobacco stems, 4 oz.; pour on a gallon of water, and boil ten minutes; strain, and add 4 oz. soft soap; apply when cold with whisk broom.

Mildew—This is often found on roses when they are shaded too much. A continuance of damp weather also produces mildew. The remedy for this is simple, if taken in time, and consists of a sprinkling of soot or sulphur. This should be applied either early in the morning, while the dew is on the plants, or else the plants may be given a sprinkling of water and the remedy applied then, so it will adhere to the leaves.

Red Spider—This insect is found more commonly on roses grown in the house, where the atmosphere is dry and hot. They are very small, but should the foliage on your tender roses assume a yellow tinge, watch for the red spider, a reddish brown in color. An application of whale-oil soap, dissolved in warm water, will usually destroy them. As the red spider is found on the under side of the leaf, it is necessary to use a bulb or syringe for this solution, to throw the water on the desired spot. It is well to wash the plants occasionally with clear water when using this solution.

Slug—The slug is the larva of the saw-fly. The female flies perforate the rose leaf in different places, and deposit their eggs in these incisions. These hatch rapidly, and the slugs feed on the foliage. Powdered white hellebore is the best remedy; a solution of whale-oil soap is also good.

Miscellaneous Border and House Plants and Bulbs

CALLA LILY.

Ethiopica—The well-known Egyptian Lily, or Lily of the Nile, with large, white flowers, broad foliage, it will prosper under very adverse circumstances, if given plenty of water. It is an excellent plant for aquariums. In the spring it may be planted in the garden until autumn.

CARNATIONS.

White, carmine, rosy pink and striped; very beautiful and fragrant, continuing in flower a long time. Plant in pots in fall, and grow in conservatory or parlor window. One of the best house plants.

CHRYSANTHEMUMS.

The prettiest of late autumn and early winter flowering plants. In November and December there is nothing that will make such a cheerful display. Plant in pots and place them in the house where they will have the sun. The prevailing colors are white, yellow and red, the red being the least interesting.

NEW DAHLIAS.

The Dahlia is the grandest autumn flower we have. Nothing is its equal in any respect in September and October. It is in its glory when everything else is faded or fading, and surrenders only to the frost king. Put Dahlia tubers in the ground when the season becomes warm, covering the neck about three inches. If any shoots start, thin them out. After flowering, and before hard frosts, take up the plants, remove the tops, dry the bulbs a little, and put in the cellar till spring, when they can be divided and replanted. Look at them occasionally to see that they are not shrivelling from too dry an atmosphere, nor starting the eye early in consequence of too much moisture and warmth.

SHOW DAHLIAS.

This is the old-fashioned densely double type of Dahlia, which will always have many admirers, and which we now offer in a list of new and improved sorts. They are very free, early and continuous bloomers, and are splendid for cutting.

Arabella	Pink.	Honest John	Purple.
A. D. Livonia	Yellow.	James Vick	Purple.
Bird of Passage ...	Pink and white.	Mirefield Beauty ...	Red.
Chas. Lanier	Yellow.	Maid of Kent	Red and white.
Dreer's White	White.	Meadows of Gold ..	Primrose yellow.
Emily	Pink.	Mad. Alf. Moreau ..	Mauve pink.
Ethel Vick	Pink.	Oriole	Yellow.
Grand Duke Alexis.	White.	Purity	White.

POMPOM DAHLIAS.

The Pompom, or Bouquet Dahlias, have small but very perfect flowers, only from one to two inches in diameter, while the plant is of nearly the common size. The dainty little flowers are produced very freely.

Catherine	Bright yellow.	White Astor	White.
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DECORATIVE DAHLIAS.

Decorative Dahlias are an intermediate form between Show and Cactus types, and are without the formality and stiffness of the Show Dahlias, bearing large perfectly formed blooms on long stiff stems, and are of easy culture.

Black Beauty	Rich dark red.	Wm. Agnew	Rich dazzling carmine red.
Cliff. W. Bruton ..	A fine bright yellow.		

CACTUS DAHLIAS.

Characterized by long, narrow, pointed, tubular and twisted petals of graded lengths, giving layer flowers. Very striking and attractive appearance.

We offer a superb collection in:—

Pink,	Purple,	Red,	White.
Davidson's Perfection....	Dark purple.	Lady Grosvenor....	Salmon pink.

NEW CENTURY SINGLE DAHLIAS.

These magnificent Single Dahlias are all of very branching habit. Flowering early, profusely and continuously throughout the season. Flowers four and a half to six inches across, stems three feet long, and when cut keep in good condition for many days.

COLLARETTE DAHLIAS.

A new class of Dahlia. No one unfamiliar with this type can form any idea of the beautiful, artistic blending of soft and rich colors which is found in most of the newer sorts. All have single flowers, with an additional row of short petals around the disk, this forming a frill or collar, which is usually of a different color from the rest of the flower:—

- Comte Cheremeteff**—Vermilion-red shaded to orange at tips; creamy white collar.
- Director Rene Gerard**—Creamy-white suffused and marked with French purple, cream-white collar.
- Maurice Rivoire**—Ox-blood red and white fringed collar.
- Mme. Capron**—Brilliant reddish-purple; collar striped white.
- Mme. E. Poirier**—Deep purple, suffused with lighter shades, which gives it a violet-blue effect; collar white. The nearest approach to a blue.
- Mons. L. Ferard**—Rich purplish-garnet, marked white; collar white with carmine markings.
- Signorina Rosa Esengrini**—Bright lemon-yellow marked with orange-scarlet; collar bright lemon-yellow.
- Souvenir De Chabanne**—Lemon-yellow with coral red markings; collar lemon-yellow tipped white.

LILY OF THE VALLEY.

The Lily of the Valley is as hardy as any plant can possibly be, and when planted in the open ground will increase pretty rapidly. For the house we have what we call "pips," young roots with flowering stems, that will bloom in a few weeks after planting, and will flower well in baskets of damp moss or potted.

SUMMER AND AUTUMN FLOWERING BULBS

That Require Taking Up in the Fall to be Kept from Freezing.

GLADIOLUS.

These are among the most showy and brilliant of all bulbous plants. Nature is nowhere more lavish of her paint than upon the flowers of the Gladiolus. They should be planted out of doors in the spring—never in the fall, as the bulbs will not stand freezing. They are however, excellent for window culture, planted in vases, either singly or in groups.

LILIUM (Lily).

The Lilliums are extremely hardy, and with few exceptions quite fragrant, and most of the varieties are exceedingly beautiful.

- Auratum** (The Golden Banded Lily of Japan)—Flowers white, dotted with crimson spots and a golden band running through the middle of each sepal. A magnificent flower, measuring often twelve inches in diameter.
- Japonicum Longiflorum**—This is one of the finest white lilies. It is a long trumpet-shaped flower, of a pure, pearly white; very fragrant, hardy, and a free bloomer. Excellent for pot culture.
- Lancifolium Album**—Pure white. A very delicate and beautiful variety from Japan.
- Pardalinum**—A very handsome small-flowered variety; yellow and red spotted.
- Tigrinum fl. pl.** (Double Tiger Lily)—Bright orange scarlet, with dark spots.

TIGRIDIAS.

Shell Flower—One of our favorite summer-flowering bulbs, of the easiest culture, displaying their gorgeous, tulip-like flowers of orange and scarlet daily from July to October.

FLOWERING BULBS TO BE PLANTED IN THE FALL.

LILIUM (Lily).

- Candidum**—Pure white, sweet scented. A very beautiful and desirable sort.
- Easter Lily** (Bermuda Easter—*Harrisii*)—Large, pure white, trumpet-shaped flowers, of great beauty and exquisite fragrance. This is the most valuable and popular variety in cultivation for winter blooming, many thousands being grown each season for church decorations at Easter.

Lancifolium Rubrum—A most exquisite sort; sepals white, and dotted all over on the face side with crimson or carmine spots. Hardy, free blooming, and fine for pot culture or the garden. It cannot be too highly recommended or too generally cultivated.

Lancifolium Punctatum—Pink and white.

Tennifolium—One of the earliest flowering lilies; foliage slender, and flowers brilliant scarlet. This is a little beauty.

Fancy Grasses

Nothing serves the purpose better or is more useful or ornamental, than our collection of fancy grasses for lawn decoration, and for concealing unsightly objects they are invaluable. From the Towering *Arundo Donax* to the *Eulalia Gracillima* the greatest effects are produced, and the planting of these grasses lends a tropical effect to any garden or lawn. A good effect is produced by planting them in beds; *Arundo Donax* in the centre, surrounded by the *Eulalia Japonica Zebrina* and the *Eulalia Gracillima* in front, or planted as borders will conceal any unsightly building or fence. Late in the fall these grasses are covered with flower spikes; they resemble ostrich plumes in shape, which, when cut and dried, make handsome ornaments for the house in winter.



Border of Fancy Grasses.

ARUNDO. The Reed.

Invaluable for creating tropical aspects in a garden.

Donax (Great Reed)—A handsome Reed, growing from 10 to 15 feet high. Its attractive foliage renders it very effective on lawns.

Donax Variegated—A magnificent variety of the preceding; leaves beautifully striped with white.

EULALIA.

Japonica—The type; a vigorous grower with large plumes.

Gracillima—A beautiful ornamental grass with narrow graceful foliage. Very valuable.

Variegata—Handsomely variegated leaves.

Zebrina (Zebra-striped Eulalia)—One of the most beautiful of ornamental grasses; foliage marked crosswise with bands of white and green.

ERIANTHUS. Ravenna Grass.

Ravennae—Resembles the Pampas Grass, but blooms more abundantly. Attains a height of from nine to twelve feet. Being perfectly hardy, is a valuable grass for the decoration of lawns.

Hardy Herbaceous Plants

The demand for hardy herbaceous, perennial or old-fashioned plants has assumed very large proportions. It has been our desire to meet this demand, and we now offer what we consider a very choice selection of such things as will prove satisfactory for this country.

The figures at the end of each description indicate the height in feet attained by these plants at maturity. The months during which they flower are also named.



Border of Perennial Plants.

ACHILLEA.

Ptarmica fl. pl.—Flowers borne in great profusion the entire summer on strong erect stems, of the purest white; it is unexcelled as a cut flower. 1½. July-October.

Millifolium Roseum—Finely cut leaves of rich green, pink flowers in compact heads; good border plant and fine for cutting. 2. July-August.

ACORUS. Sword-Grass, or Flag.

Marshy plants of easy culture.

AEGOPODIUM. Bishop's Weed.

Podagaria variegata—A beautiful rapid grower; fine for borders of beds and covering barren places. 1½. May-August.

AMSONIA.

Tabernaemontana—A strong shrubby plant, with dense trimmed spikes of delicate blue flowers. 4. July.

ANEMONE. Wind Flowers.

Japonica—A distinct and beautiful species; flowers 2½ inches in diameter; bright purplish rose, with golden yellow centres, borne in great profusion from September to November. Height 2½; habit neat and compact; very desirable and effective as a pot plant, and in lines or masses in beds or mixed borders. 2.

Var. Alba (Honorine Jobert)—A distinct and beautiful variety of the preceding; flowers $2\frac{1}{2}$ inches in diameter; pure white, centre golden yellow, borne in great profusion from September to November; very desirable and effective as a pot plant, and in lines or masses in beds or mixed borders. 2.

Whirlwind—A variety producing double white flowers in great profusion in the autumn. One of the finest fall-flowering perennials. 2. August-October.

AQUILEGIA. Columbine.

An old favorite that succeeds in any ordinary garden soil, all being useful for cut flowers.

BAPTISIA. False Indigo.

Australis—Blue False Indigo—Deep blue lupin-like flowers in racemes. 2 to 5 June.

BELLIS.

English Daisy—We have several double English daisies; they are old-fashioned but always interesting; white flowers. $\frac{1}{2}$. May-June.

BOLTONIA.

One of the prettiest of hardy plants, growing 4 to 5 feet high; it has pure white aster-like flowers, produced in great profusion; fine for cutting. 4. July-September.

CAMPANULA. Bellflower.

Is one of the most important of hardy plants; they combine a wide range of habit and color, and being perfectly hardy increases their usefulness. We can make up a fine collection.

CENTAUREA. Dusty Miller.

Are among the desirable plants for bedding and border planting. On account of their bright silvery foliage they form a striking contrast with the green foliage of other hardy plants.

Macrophyllia—Large, bright, yellow flowers. 3. June.

CLEMATIS. Virgin's Bower.

Davidiana—Large auxiliary clusters of fragrant blue flowers. 3.

Integrifolia—Fine blue, bordered with white. 2. June.

Recta—Large panicles of small, fragrant, white flowers, on long stalks. 3 to 4. June.

Tubrosa—Erect species, small purple flowers.

COREOPSIS. Tickweed.

This strikingly beautiful plant is now the most popular perennial plant in cultivation. It begins to flower early in June and continues to flower until killed back by the frost; until then it is continually one mass of golden-yellow; the flowers are borne on a long, graceful stem, making it invaluable for cutting; strong clumps.

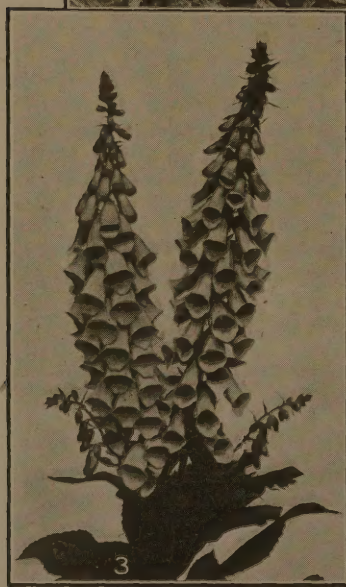
Floribunda fl. pl.—Flowers larger than *C. Floribunda* type, with two or three rows of irregular petals; very curious and floriferous plant. $2\frac{1}{2}$. July-September.

Grandiflora—Large yellow flowers on long stems; fine for cutting; early summer until frost. 3.

Lanceolata—Large golden yellow flowers; profuse bloomer; keeps in flower throughout the summer; one of the best hardy plants. 1 to 3. Very handsome. June.

DELPHINIUM. Larkspur.

A remarkably showy class of tall growing plants, producing magnificent spikes of blue flowers in summer. We know of no plants which will afford greater satisfaction than these.



1. Gaillardia. See page 113.

2. Poppy, Oriental. See page 118.

3. Digitalis (Foxglove). See page 113.

DIANTHUS. Hardy Pink.

This is certainly an interesting and useful class of plants, blooming in early spring. Many of the varieties we offer are improved forms of these old-time favorites; fine for cut flowers.

Barbatus—Sweet William—In all shades. 1. May-June.

DICENTRA, or DIELYTRA. Bleeding-Heart.

Spectabilis—A handsome, most curiously formed rosy-crimson flower, with white and blue tinged protruding stamen; one of the finest border plants; is quite hardy; well adapted for blooming in the winter. 1 to 2. May-June.

DICTAMNUS, FRAXINELLA, or GAS PLANT.

A choice perennial, forming a bush about 2 feet high, and bearing spikes of curious red and white flowers, which are fragrant.

DIGITALIS. Foxglove.

Flowers all shades, from the purest white to the darkest red. 4. July-August.

ECHINOPS. Globe Thistle.

Very curious plant; thistle-like; deep steel-blue flowers. 4. July-August.

ERYNGIUM. Sea-Holly.

The Eryngium, so-called Sea Holly or Ivory Thistle, are very pretty, being glorified thistles in general appearance.

Amethystium—Flowers in globular heads, amethystine blue; foliage spiny and lacinated. 3. July-August.

Planum—Blue. 3. May-September.

FUNKIA. Plantain Lily.

All handsome and well adapted for low, marshy ground, borders, rock-work, and, in fact, they will grow in any position. The foliage in all the varieties is handsome, and the flowers strikingly beautiful. The variety **Undulata** is very useful for forcing.

Alba—Pure white, fragrant flowers in summer.

Caerulea—Light blue, with dark green, glossy foliage. 1. June-July.

Rosea—Rosy pink. 1. July.

Undulata Variegata—The very finest of the Funkias. It has ovate spatulate leaves the margins deep green and centre a beautiful creamy white, making it very attractive for the border, as it keeps its color the entire summer. Towards the latter part of the season it produces long spikes of beautiful light blue flowers. 1. June-July.

GAILLARDIA. Blanket Flower.

The brilliancy of the Gaillardia is unsurpassed; they are simply invaluable among cut flowers on account of retaining their beauty for so long a time after cutting. They flower from June to November; in fact, would flower the whole winter if the severe cold did not stop them. They thrive in almost any soil, and are of easy culture. We recommend them very highly. Our strain is now very much improved.

Grandiflora Compacta—This is a low-growing variety, the plant forming round bushes of about 2 feet high. The richness and large range of color is finer than on the high-growing varieties. Blooms steadily from June until late in fall. 2. June-October.

Maxima Grandiflora—Yellow; orange red.

GYPSOPHILA. Chalk Plant.

Paniculata (Infant's Breath)—A fine herbaceous plant, forming a compact bush about four feet high; flowers small, white, in large, loose panicles. Valuable for bouquets. July.



1. Shasta Daisy. See page 120.
2. Iris, German. See page 115.
3. Phlox, Perennial. See page 119.

HELIANTHUS. Sunflower.

All of easiest culture in any ordinary soil. Though there are a great many species in cultivation, we limit the list below to such as possess true merit, both in the color and shape of the flower and freedom from weediness. Those mentioned are admirable for the flower border or to use with shrubbery.

Maximiliana—An elegant species. The latest bloomer of its class, as well as one of the latest of the flowers. Flowers clean yellow, varying from 3 to 5 inches across, with several rows of petals and a full centre. Handsome in bud or flower. 8. October-November.

Multiflorus fl. pl.—Double, deep yellow flowers with guard petals. A constant bloomer. Very effective. 4. August-September.

Orygalis—Very long, gracefully bending stalks, forming a handsome clump, and clothed from top to bottom with very long, willowy, drooping foliage. Flowers deep lemon yellow with darker centres, and in spikes often 4 feet long. 8. September.

Rigidus (Prairie Sunflower)—Flowers large golden yellow, produced abundantly; a showy plant. $3\frac{1}{2}$. July.

HELIOPSIS.

Pitcheriana—Pretty, daisy-like, yellow flowers that are similar to Rudbeckias, but more graceful, and borne on branching plants. Clear yellow, with red-maroon centres. They have good stems and are excellent for cutting.

HEMEROCALLIS.

Flava—Day Lily. Flowers bright golden yellow, sweet scented. 3. June-August.

Kwanso Plena—A variety of the common Day Lily, with large double flowers of a rich brown orange color. 4. June-August.

HEUCHERA. Alum Root.

Sanguinea—This is one of the finest additions to our hardy plants, as it flowers profusely the entire summer, and can also be forced under glass during the winter months. The bright crimson flowers are borne in long drooping arching sprays for weeks in succession, and are excellent for cut purposes. 1. May-September.

HOLLYHOCK.

There are very few plants in the world so grand, and yet so perfect and delicate as the Hollyhock. Its flowers are quite as double, and almost as sure and perfect as those of the Camellia, and when we remember that they mass around a column from three to five feet in height, we get some idea of their beauty. Seeds sown in the spring produce plants that will bloom the second summer. Plants set out in the spring will flower about midsummer, and for several years, if not allowed to bloom too freely the first year. We have excellent, healthy young plants grown from seed, that if planted in the spring will flower the first summer, and usually for two or three summers after. The colors are nicely assorted, so that almost every color, from white to purple, may be expected.

INCARVILLEA.

A new hardy tuberous-rooted plant, and one of the choicest perennials ever introduced. It produces large, rose-colored, trumpet-shaped flowers, which last in perfection a long time; these are produced in clusters on stems 18 inches long.

IRIS. Fleur de Lis.

Germanica—We take pleasure in offering to our patrons a fine collection of fifty varieties of this exquisite Iris. 3. May-June.



Japanese Iris.

Kaempferi—We have fifty of the finest varieties, imported from Japan; they cover every color known in Iris. 3. May-June.

LOBELIA.

Handsome border plants, thriving in any ordinary garden soil, but preferring a moist, deep loam, where they will not suffer from drought. Few plants are more effective at their season of bloom, which extends from early in August till late in September.

Cardinalis (Cardinal Flower) — Rich, fiery cardinal flowers; strong plants, often producing 10 to 18 spikes, 24 to 30 inches long.

LYCHNIS (Campion).

All of the *Lychnis* are of the easiest culture, thriving in any soil and this, in addition to their brightness, has brought them into high favor with lovers of hardy plants. Perhaps no class of plants has more common or popular

names, of which the following is but a partial list:—Campion, Jerusalem Cross, Lamp Flower, Maltese Cross, Ragged Robin, etc.

Chalcedonica—This excellent old perennial is unrivalled for grouping and for border, heads of brilliant orange-scarlet, on tall stiff stems, grows 2-3 feet high. June and July.

Paeonies

A splendid class of shrubs, flowering in all shades, from red and lilac to white, with blooms from four to eight inches in diameter. Many of them are very double, and have delicate and refreshing fragrance; they are easily cultivated and require but little protection.

CLASS I.—PAEONIA MOUTAN. TREE PAEONIES.

Moutan—The parent species is a native of China. The varieties are handsome flowering shrubs, attaining from 6 to 8 feet in height in about ten years, with proper care. The flowers are remarkably striking, of gorgeous colors, very numerous and enormous in size, often measuring 6 to 9 inches across, and appearing in May.

SELECT VARIETIES OF PAEONIA MOUTAN.

Bijou de Chusan—Flesh white; beautiful.

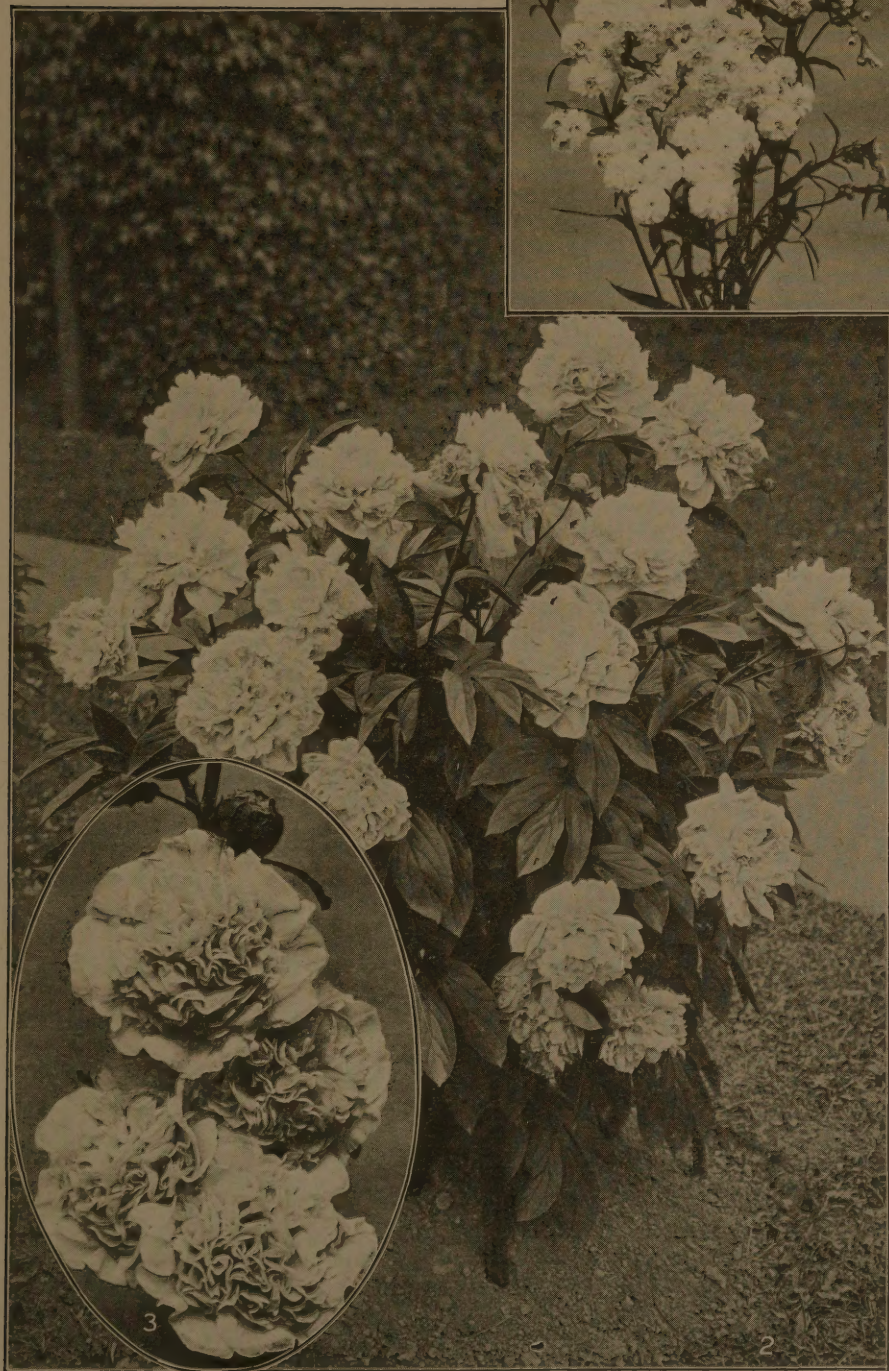
Louise Mouchelet—Very large, rosy red, one of the finest.

Reine Elizabeth—Rosy crimson in centre, shaded off to a light rose towards the margin; full, and of immense size; extra.

CHINESE HERBACEOUS PAEONIAS.

Few people realize that the old-fashioned (*Piny*) has been so improved upon that in the newer varieties it is nearly as sweet scented as the Rose, and in brilliancy and variety of color its equal. It is perfectly hardy, can be grown anywhere, and is free from all diseases and insects.

Our collection shown herewith embraces the very choicest sorts, the cream of the best producers in Europe and America. Grow from pure white, straw



1. Achillea. See page 110.
2. Paeonia, Chinese Herbaceous. See page 116.
3. Double Hollyhock. See page 115.

color, salmon, flesh color and blush, to lilac and deep rose. These are beautifully showy and easily cultivated plants, blooming from the beginning of May to the end of July. Paeonias are planted with best effect in mass, beds and borders. A large bed in an extensive lawn makes a great show.

Beaute Francais—Light flesh pink, fragrant; early.

Calipetela—Salmon, white.

Chas. Binder—Violet red, fragrant; good.

Chas. Verdier—Light lilac rose; very large, and of perfect form; a superb variety; late.

Chinese Purpurea—Large, early flowering, purple.

Constant Devred—Soft clear purple, imbricated like a rose; fragrant; superb

Cytheree—Creamy white, centre carmine spotted.

Delacourt Verhille—Pure white, centre carmine spotted.

Dr. Brettoneau—Rosy violet; very large and fine; fragrant.

Duch. de Nemours—Sulphur-white, changing to pure white. Particularly beautiful in the half-open bud state.

Festiva Maxima—Pure white and a few marks of carmine in the centre; perfectly globular, beautiful and sweet, the best white.

Fringe Leaved—Foliage a bright green, in long, thread-like filaments, which give the plant the appearance of fringe. Flowers double crimson; globular. Hardy, rare and fine.

Jean D'Arc—Outside petals rose colored, inside straw colored, with crimson spots. Extra.

Louis Van Houtte—Dark crimson; very compact; one of the best of its color.

L'Indispensable—Creamy white, centre rosy, remarkably large and loose multi-petaled head.

Mde. Ducl—Choicest for cutting for both form and color, shaped like the high built Chrysanthemum, and colored evenly a warm true pink; its beauty is irresistible.

Magnifica—Creamy white, light pink centre.

Marie Lemoine—Extra large, late, free flowering, ivory white.

Papaveriflora—White, lightly tinged with yellow and marked with red in the centre; very fine.

Prolifera Tricolor—Two shades of pink, cream centre.

Reine Des Roses—Salmon pink.

Triumph du Nord—Rosy violet.

PAPAYER (Poppy).

The perennial Poppies are among the most brilliant of hardy flowers; the graceful, brightly-colored, cup-shaped flowers, borne on long stems, are invaluable for cutting for the table.

The large flowering or Oriental Poppies are the most showy plants in a garden. They make a magnificent effect, especially when planted in large clumps. All poppies should have a light covering for the winter; straw or leaves are the best for this purpose.

Orientalis (Oriental Poppy)—Deep scarlet, purple centre. 3. July-August.

Princess Ena—Earliest bloomer, tall flower, salmon pink, fine for cutting.

Princess Victoria Louise—Bright salmon.

Perrys Unique—Improvement on Princess Victoria Louise.

Perennial Phlox

Among autumn flowers, this is one of the finest; vigorous grower; easily cultivated, and produces flowers of bright and varied colors in great profusion. The phlox profit by high cultivation. Liquid manure supplied during the growing season adds greatly to the size of the trusses. It is very essential that while in flower a liberal watering should be given it in the cool of the day. The phlox flowers in July and August. In order to make them autumnal flowering, all that is necessary is to pinch the shoots about the first of June, and again early in July. This will make the flowering through the month of September. Phlox



Perennial Phlox.

is seen at its best when two years old, and from then will begin to decrease in value. You should, therefore, secure a fresh collection each year. All new and desirable varieties may be had of us.

Africa—Carmine purple, with dark blood red centre.

Albion—A strong, vigorous grower, producing very large panicles of pure white flowers, with a faint red eye.

Antonin Mercie—Light ground color, one-half of each petal suffused bluish-lilac.

Baron Van Dedem—Brilliant cochineal-red, with salmon shadings.

B. Comte (Medium)—Brilliant French purple, with crimson-carmine shadings.

Bouquet de Fleur—White with deep rose eye.

Bridesmaid—Pure white, with large crimson-carmine eye.

Champs Elysee—A bright rosy-magenta; very effective.

Commerzienrath Borsig—Orange red, with carmine centre.

Coquelicot—A new variety, and one of the best; flowers large and of a fiery red color.

Eiffel Tower—A beautiful pink with scarlet centre, tall, superb.

Eclairneur—Purplish crimson.

Flora Hornung—White, with large crimson centre. Dwarf.

Frau Anton Buchner—Pure white, very fine, dwarf habit.

Fraulein G. Van Lassburg—Large snowy white flowers, best white.

Frau Rosalie Wildt—Soft, pleasing mauve-rose, with carmine eye.

General Van Heutsz—Brilliant salmon-red, with light centre.

George A. Strolein—Scarlet-orange, bright crimson eye.

H. O. Wijers—Pure white, with crimson-carmine eye.

Henry Murger—White, with crimson-carmine centre; a beautiful variety.

Jean Bart—Pale clear pink, cherry red centre.

Jeanne D'Arc—Pure white, late flowering.

La Vague—Pure mauve, with aniline-red eye.

Mercier—Lavender striped darker.

Mme. Paul Dutrie—Delicate lilac-rose in shade like a soft pink Orchid; flowers very large, borne in immense panicles.

Mrs. Jenkins—Pure white, enormous flowers; early.

Pierre Bayle—Crimson-carmine, overlaid with orange scarlet.

Riverton Jewel—A lively shade of mauve-rose, illuminated by a carmine-red eye; a splendid improvement on the popular variety Asia.

Rosenberg—Bright reddish violet, with blood-red eye.

Ryndstrom—Color a lively shade of rose-pink, much like Paul Neyron Rose flowers very large. One of the best for massing.

Panama—Purplish crimson.

Queen—Cherry red with scarlet centre.

Sunshine—Aniline-red, with crimson eye and light halo.

Von Hochberg—Richest crimson purple.

PLATYCODON.

(Balloon Flower, or Japanese Bell Flower.)

The *Platycodons* are closely allied to the *Campanulas*, and form neat, branched bushes of upright habit. They do best if planted in early spring. They grow from 2 to 2½ feet high, and after the third season each plant will have from ten to twelve stalks covered with the lovely blue blossoms for nearly a month, beginning about July 10th. They are also free from attacks of insects, and if planted in good soil and well covered in late autumn with a litter of leaves or stable manure, will be found to be quite hardy.

PYRETHRUM.

Hybridum fl. pl.—Too much cannot be said in favor of this grand hardy perennial, which will thrive in any good garden soil where there is good drainage and full exposure to the sun. The main season of blooming is in June, but if the old flower stems are removed they will give a fair sprinkling of flowers in the autumn. Splendid for cutting. We offer choice named sorts in crimson, pink and white.

RUDBECKIA. Cone-flower.

Laciniata fl. pl. (Golden Glow, or Summer Chrysanthemum)—A large showy plant, attaining in good soil a height of 6 to 8 feet the same season planted. Flowers 3½ inches in diameter, double, well formed, and of a deep golden yellow color, resembling yellow *Chrysanthemums*, and borne on long stems which render them suitable for cutting. Plants bloom profusely from July till September. One of the best novelties in hardy flowering plants.

Purpurea (*Echinacea purpurea*)—Reddish purple, a fine plant; very distinct in color. 4. August-September.

SEDUM (Stone Crop).

Fabaria—This is the most popular of all *Sedum*, and is used for the greatest variety of purposes, obtains a height of 18 inches, broad, light green foliage, most ornamental, and immense heads of handsome showy rose-colored flowers; indispensable as a late fall blooming plant.

SHASTA DAISY.

Has large white flowers, blooming throughout the summer, very showy.

SPIREA. Meadow Sweet.

Astilboides—White flowers and panicles.

TRITOMA. Red Hot Poker.

The greatest bedding plant ever introduced, surpassing the finest cannas for attractiveness and brilliancy; equal to the gladiolus as a cut flower, and blooms incessantly from June until December, regardless of frost. Plants perfectly hardy in open ground all winter, with a slight covering. Plants show from 6 to 20 grand flower stalks all the time, each holding at a height of 3 to 4 feet a great cluster of flame-colored flowers of indescribable beauty and brilliancy. Each cluster keeps perfect several weeks, and when it fades two or three more are ready to take its place. Fall frosts do not kill it or stop its blooming, and it is as brilliant as ever long after all other garden flowers have been killed. For cutting it is unsurpassed, and the beautiful long spikes keep several weeks in water. It has created a sensation in the New York cut-flower market, and will be a great factor among cut flowers in future. 3. July-October.

YUCCA. Spanish Bayonet.

Has a fine appearance; the stem is 2 feet above the ground, covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rock-work.

Filamentosa (Adam's Needle)—Thread-leaved, creamy-white; 3 to 4 feet. July.

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